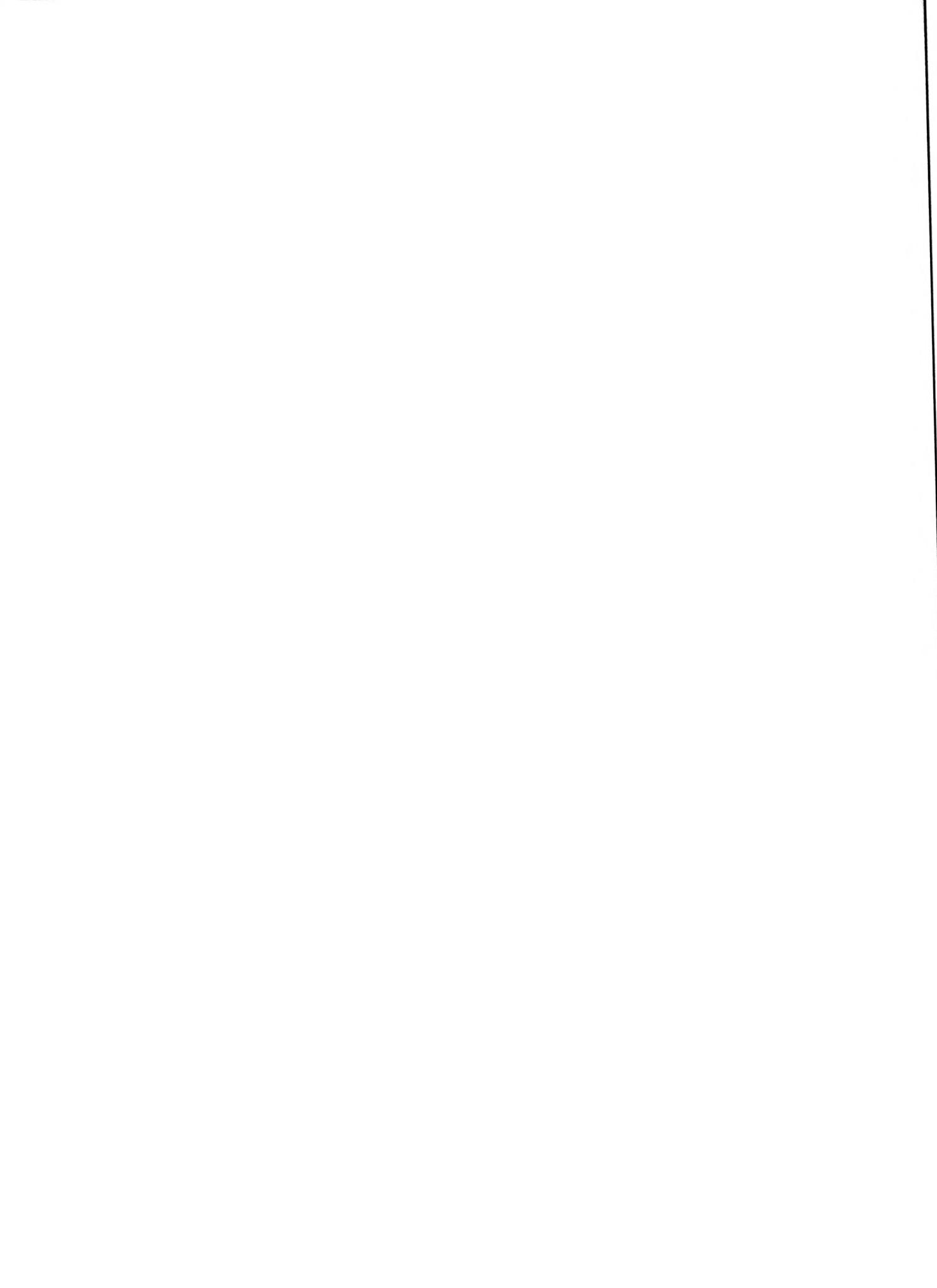
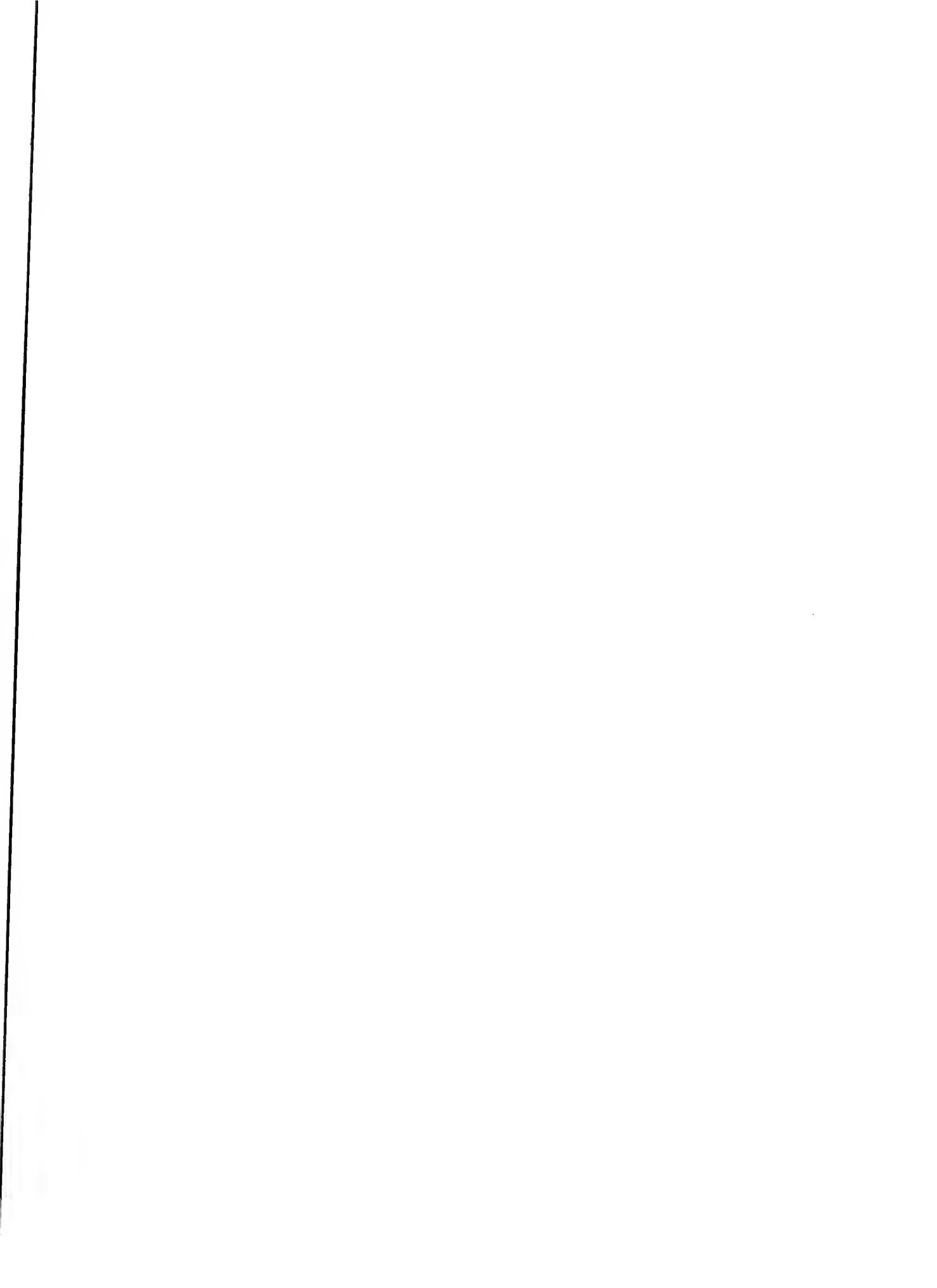




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Western Mining in the Twentieth Century Series

THE KNOXVILLE MINING DISTRICT, THE McLAUGHLIN GOLD MINE,
NORTHERN CALIFORNIA, 1978-1995

Volume IV

Donald Gustafson	HOMESTAKE EXPLORATION GEOLOGIST, 1975-1990
Bonny Jean Hanchett	OWNER AND EDITOR, CLEAR LAKE <u>OBSERVER</u> , 1955-1986
James H. Hickey	DIRECTOR OF CONSERVATION, DEVELOPMENT, AND PLANNING FOR NAPA COUNTY, 1970 TO 1990
Irene Jago	THE JAGOS OF JAGO BAY, CLEAR LAKE
James Jonas	LAKE COUNTY FUEL DISTRIBUTOR
Dolora Koontz	ENVIRONMENTAL ENGINEER, McLAUGHLIN MINE, 1988- 1995

With an Introduction by
Duane A. Smith

Interviews conducted by
Eleanor Swent
in 1993, 1994, 1995 and 1997

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Donald Gustafson (b. 1938), exploration geologist, Anaconda Co., 1966-1975, Homestake Mining Co., 1975-1990: discusses mercury-hot-springs-gold association, McLaughlin Mine discovery, development, community relations efforts. Bonny Jean Hanchett (b. 1920), owner, editor, Clearlake, CA, Observer, 1955-1986: opposing Scotch Creek dam, combatting Clear Lake gnat infestation, opposing Joe Mazzola. James Hickey (b. 1927), director of conservation, development, planning, Napa County, CA, 1970-1990: establishing Napa Valley Agricultural Preserve, coordinating McLaughlin Mine permit application for Napa, Lake, Yolo Counties. Irene Jago (b. 1912), teacher: recalls husband John Jago, owner, Uncle Sam/Konocti Mine. James Jonas (b. 1938), fuel distributor: discusses bulk plant management, negative effects of environmental regulations on fuel dealers. Dolora Koontz, (b. 1954), environmental engineer, McLaughlin Mine, 1986-1995: monitoring environmental quality, reclaiming mine site and waste dumps, reporting to government agencies.

Introduction by Duane Smith, Professor of History and Southwest Studies, Ft. Lewis College, Durango, CO.

Interviews conducted by Eleanor Swent in 1993, 1994, 1995, and 1997 for the Western Mining in the Twentieth Century Oral History Series. Regional Oral History Office, The Bancroft Library, University of California, Berkeley.

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INTRODUCTION TO KNOXVILLE by Duane A. Smith

Imagine, if you would, what it would be like to have a series of interviews from people of all walks of life from a nineteenth century mining town and district--for example, a Fiddletown, California; a Silver City, Idaho; or a Caribou, Colorado. Would it not be exciting to "hear" first hand the stories of miners, store owners, lawyers, teachers, and a variety of other folks that make up the mining West?

Such a series of interviews would be the perfect answer to the Roman statesman, orator, and philosopher, Marcus Tullius Cicero, who observed more than 2,000 years ago: "History is the witness that testifies to the passing of time; it illuminates reality, vitalizes memory, provides guidance in daily life, and brings us tidings of antiquity." Imagine, then, what the Knoxville/McLaughlin oral history project is going to mean to future generations.

The Knoxville, California, mining district has a long mining history. It started in the 1860s with mercury mining and continued into the 1990s with Homestake Mining Company's McLaughlin gold mine. Under the guidance of Eleanor Swent, and as part of the Regional Oral History Office's Western Mining in the Twentieth Century series, a comprehensive oral history project of this mining district was launched in 1993. These fascinating and significant volumes are the finished projects.

While obviously impossible to go back beyond the turn of the century, interviews were conducted with miners, ranchers, journalists, teachers, and merchants who were in the district before the arrival of Homestake. The words of these people provide an exciting look at a district in transition and decline. Then came Homestake and their world changed.

Some gold mines had been operated here in the nineteenth and twentieth centuries, but they were nothing like what occurred when a major mining company became interested. Homestake's geologists found enough gold to warrant development. The concept would be an open pit mine and mill that would impact Napa, Lake, and Yolo Counties in northern California for a generation and provide for the future.

Five and one-half years went into planning for the McLaughlin gold mine, including 327 approvals needed for the mine's development. Not only were some mining ideas new and ground breaking, but the operation was sitting in one of the most environmentally aware states in the country. Homestake spent over \$283 million in start-up costs, before mining commenced in March 1985. The first year's production of 83,836 ounces of gold showed that the planning and work had been worthwhile from a dollars-and-cents aspect. Homestake was proud of its operation.

"The McLaughlin mine is the site of the first successful commercial application of the autoclave processing technology for extracting gold from ores. The operation began production in 1985 and is a showcase for environmental responsibility."

Homestake would continue to mine the pit into 1996 when mining ceased, except for processing previously stockpiled lower-grade ore to be worked for approximately another eight years, "using a conventional direct cyanide leach process." Reclamation, which has been conducted simultaneously with mining, would also continue into the next century. As Homestake's annual report in 1995 stated, "Reclamation of mine waste dumps is scheduled for completion in the latter part of 1996 with the final placement of top soil and hydroseeding. The planting of oak trees and other indigenous vegetation will continue seasonally until the area is completely reclaimed."

All this makes the oral history project that much more exciting; it was conducted while the district still operated and memories were fresh and riveted on a host of topics and concerns. This multi-volume series covers almost every conceivable aspect and impact--it is a monument to a refreshing, innovative way of approaching mining history.

These volumes provide a case study of twentieth century mining, environmental issues, and regional concerns, the successes, failures, tensions, and developments that go to make up a 1980s and 1990s mining operation and the people involved from all walks of life. They are a gold mine of primary documentation and personal memories of an era that is passing into history. A perusal of the table of contents will give the reader an idea, but the interviews need to be "assayed" carefully to grasp the whole story of what went on at the McLaughlin mine and why its impact was so significant. This is a "high grade" effort all the way.

Cicero would be proud. These volumes do illuminate reality, vitalize memory, and provide guidance in daily life. Without question, they testify to the passing of time and will eventually bring "us the tidings of antiquity."

*
Duane A. Smith
Professor of History and
Southwest Studies

September 1997
Fort Lewis College
Durango, Colorado

PROJECT HISTORY--Knoxville District/McLaughlin Mine Oral History Project

The development of the McLaughlin gold mine in the Knoxville District of Napa, Lake, and Yolo Counties in California in the last quarter of the twentieth century was a historically significant event. The mines of the district had been major producers of mercury since 1861. In 1888 an official report by G. F. Becker on the quicksilver deposits mentioned the presence of free gold which could be obtained by panning. It took almost a century before this knowledge could be acted upon when Homestake Mining Company signed an agreement with James William Wilder, owner of the Manhattan Mine, in 1978.

Advisors to the oral history series on Western Mining in the Twentieth Century¹ who were also Homestake directors, Professor Douglas Fuerstenau, principal faculty advisor, Clifford Heimbucher, and John Kiely, all urged the Knoxville/McLaughlin oral history project, as did advisor Sylvia McLaughlin, widow of the Homestake chairman for whom the mine was named. It was decided it should be a community oral history, in contrast to the previous volumes in the series which documented individual careers.

The five historically important aspects are: the history of the Knoxville mercury mining district, with its periodic booms and busts; the effects of a large industrial development and influx of technically trained workers in an economically depressed rural area; the efforts to obtain permits to develop a mine near a center of environmental activism; the continuous pressure oxidation system which was pioneered at the McLaughlin processing plant; the reclamation of the mine site. The life of the McLaughlin mine was projected to be about twenty years, and most of the key players were available for interviews. It is a nearly unique opportunity to document the discovery, development, and closing down of a mine while it is happening.

The history of the Knoxville District begins in 1861 with the incorporation of the Redington quicksilver mine, also known as the XLCR or Knoxville mine, then employing as many as 300 men. The town of Knoxville had thirty or more buildings, including a store, hotel, postoffice, Wells Fargo office, school, and cemetery. In 1872 the state legislature transferred prosperous Knoxville Township from Lake County to Napa County, although it is separated from the Napa Valley by mountain escarpments. Lake County was compensated with a one-time payment of \$3500.

¹ Information on the Western Mining in the Twentieth Century oral history series appears in Appendix F, page 320.

In 1869 Knox and Osborne opened the Manhattan Mine on the same lode as the Redington. The Oat Hill or Napa Consolidated Mine was opened in 1872. A report on the metallurgy of quicksilver issued by the Department of the Interior in 1925 says, "In 1874, the Knox continuous shaft-furnace for the treatment of both fine and coarse ores was first used in California." [Bulletin 222, p. 5] The Knox-Osborne design was further augmented by a fine-ore natural-draft furnace developed by mine superintendent Charles Livermore. The district prospered until 1905, for a decade around World War I, and from 1927-1936. Demand for mercury rose during wartime because it was used as a detonator for explosives.

Knoxville was linked by road through Sulphur Canyon with the town of Monticello in fertile Berryessa Valley. Farmers descended from early Scots settlers grew pears, prunes, wheat, and barley and occasionally worked in the mercury mines. After World War II, when California's population was growing rapidly, a dam was built which by 1956 flooded the valley to create Lake Berryessa. It attracted vacationers, and for most of them it was the end of the line. The unpaved road from Lake Berryessa to Knoxville was impassable when rains filled the creek bed. In the other direction, from Knoxville to Clearlake, there was a similar little-used road through Morgan Valley.

Although it is only a few miles from the densely populated San Francisco Bay Area, in 1978 Knoxville township had few telephones, surfaced roads, or bridges. Populated by ranchers, miners, seasonal hunters, and outlaws, it was one of the most economically depressed regions in California, with high unemployment. In 1991, Napa historian Robert McKenzie called it "truly the last frontier of Napa County."

The chronology of the McLaughlin Mine is as follows: in 1961, following publication of a Professional Paper by USGS geologist Ralph J. Roberts, Newmont geologists John S. Livermore and J. Alan Cope found a major deposit of micron-sized gold on the Carlin trend in Nevada. It was economic to mine because of technological advances in explosives and earth-moving equipment, and development of new methods such as heap-leaching for recovery of gold from ore. This led other mining companies to search for similar deposits of "invisible" gold.

In 1969, the National Environmental Protection Act was passed, followed in 1970 by the California Environmental Quality Act.

In the 1970s, "Bill" Wilder, principal of the One Shot Mining Company, was reclaiming batteries for Mallory Company in the furnaces at the Manhattan mercury mine. Environmental concerns had made mercury mining unprofitable, so Wilder was crushing the beautiful colored rock on his property and selling it as decorative stone. An assay from several years before had showed gold was there, but at that time mercury at \$75 a flask was more valuable than gold at \$35 an ounce, the official

price from January 1934, when the United States went off the gold standard, until 15 March 1968.

In August 1971, President Richard Nixon terminated the convertibility of the dollar into gold, and the price climbed to \$800 an ounce in 1980. In 1977, Homestake Mining Company underwent a restructuring and embarked on a program to find a world-class gold mine. Their search revealed geology reports in their files from the 1920s which encouraged exploration at hot springs near the Knoxville mercury mining district of northern California. In 1978 Donald Gustafson, Homestake geologist, visited the Manhattan Mine at the place where Napa, Yolo, and Lake Counties meet. A drilling program revealed an epithermal gold deposit which at this juncture remains unique; no extension or replica has been found in the Great Valley geologic sequence or the Coast Range thrust which were exposed at McLaughlin.

Mining companies are familiar with developing mines in remote and rugged locations, with the attendant logistical problems. In this case, there was the further challenge of obtaining permits to develop a mine in the jurisdiction of three counties, regional and state water quality districts, three regional air quality districts, various state agencies, and the Bureau of Land Management. It took more than five years and cost millions of dollars to secure the 327 required permits which made a stack of paper more than eight feet high. In addition, the ore itself was finely disseminated, fairly low grade, and as it turned out, highly refractory. Traditional methods of beneficiation were ruled out by environmental concerns, so Homestake metallurgists developed a high pressure oxidation system, incorporating technology from South Africa, Germany, Canada, and Finland, which has now been widely copied.

The eventual design was for a mine pit with adjacent crushing plant and a five-mile pipeline to conduct slurry to a zero-discharge processing plant using a variety of technologies, including autoclaves. Reclamation in the mine and on dumps began almost immediately, and at the end of the mine's life, it will be a part of the Nature Reserve system of the University of California, for research by scholars at both the Berkeley and Davis campuses.

In 1991, the Regional Oral History Office began to explore possibilities for funding the Knoxville/McLaughlin oral history. A four-year project was outlined to include about thirty-five interviews averaging three hours each, for a total cost of \$100,000, resulting in a set of volumes covering the mercury mining, the gold mining, and the resulting changes in the surrounding community. The Hearst Foundation granted \$20,000 to document the gold mine, and the Mining and Metallurgical Society of America gave \$6,000 to document the earlier mercury mining. Homestake and Chemical Lime Company each donated \$2,000, which enabled interviewing to begin in March, 1993.

The best laid plans, however, can be changed by circumstances beyond control. One of the first names on the list of interviewees was John Ransone, Homestake's construction project director. He sent helpful background documents in preparation for a scheduled interview; however, before it could be held he died of lung cancer. The project manager for the construction company, Klaus Thiel, in the meantime had been assigned to work in Brisbane, Australia, so he could not be interviewed. Several of the other Homestake people had scattered: James Anderson to Denver, Jack Thompson and John Turney to British Columbia, David Crouch to Salt Lake City, Donald Gustafson to jobs in Namibia and Kazakhstan, Joseph Strapko to Maine. William Humphrey and Richard Stoehr both underwent major surgery. Nevertheless, interviews were conducted with these and others involved in the development and operation of the mine.

Although similar difficulties occurred on the list of community leaders, by 1996 interviews had been conducted with a county supervisor from each of the three counties involved, Napa County planners, the Lake County school superintendent, community historians and pioneers, merchants, and ranchers. Some of the most vocal opponents of the mine were also interviewed.

There is a perception that the former mercury miners are all dead, killed by mercury poisoning. In fact, Dean Enderlin, a geologist at the McLaughlin Mine and also a Napa County native and historian, helped to locate some who were remarkably healthy, and who were interviewed. Elmer Enderlin in his eighties spends summers working at his tungsten prospect in Idaho and winters in Lower Lake. Anthony Cerar, also in his eighties, at the time of interviewing still actively maintained several historic mercury mines, including La Joya and Corona. William Kritikos, operator of the Oat Hill Mine, was nearly seventy-three when he died following a stroke, but was in good health at the time of his interview. Ed McGinnis, who worked around the Reed Mine as a boy, is still active in his seventies. Bill Wilder, who owned the Manhattan Mine, is a relative youngster in his seventies and in good health in Upper Lake.

The project comprises forty-three interviews in all. Two of the interviews were completed as separate volumes in 1996: William A. Humphrey, Mining Operations and Engineering Executive for Anaconda, Newmont, Homestake, 1950-1995, and James William Wilder, Owner of One Shot Mining Company and Manhattan Mercury Mine, 1965-1981. They are bound individually. Subsequent oral histories in the project will be bound into volumes containing more than one interview, arranged in alphabetical order. Supplementary documents are included as appropriate; Volume I contains general information. It is expected that researchers will refer to the entire set for a comprehensive account of the McLaughlin Mine. The oral history of Langan Swent, Working for Safety and Health in Underground Mines: San Luis and Homestake Mining

Companies, 1946-1988, completed in 1995, not part of the project, also contains relevant information.

We are grateful to all of the interviewees for their participation. There are many others who have helped also. Homestake Mining Company has supported the project not only with funds, but also in lending the Regional Oral History Office a computer and printer, and making available for research the archival video tapes and files of newspaper clippings and news releases, as well as the environmental studies, the environmental impact report, and the environmental impact statement. Early on, a day tour of the property and box lunch were provided for a van load of ROHO staff, interested students, and faculty from the University of California at Berkeley. The conference room at the mine and the San Francisco offices at 650 California Street have been used for interviewing.

James Jensen made available his extensive files on mercury mining and processing and mercury poisoning. Anthony Cerar led a vigorous hike around the Knoxville mine site, identifying foundations of long-gone buildings and workings. John Livermore conducted a tour by jeep of the Knoxville district, and suggested the importance of the Morgan North papers at The Bancroft Library. Staff members gave help at the Napa Register, the Napa Museum, the Sharpsteen Museum in Calistoga, and the Lake County Museums in Lower Lake and Lakeport. Professor Duane Smith, mining historian at Ft. Lewis College, Durango, Colorado, wrote an introduction for the first volume of multiple interviews. Professor Greg Wheeler of Sacramento State University has given valuable advice, and staff members of the California Division of Mines and Geology Les Youngs, Ron Churchill, and Kathleen Twomey have provided photos and graphs.

The tapes of all the interviews are available for study at The Bancroft Library. The completed volumes will be available at The Bancroft Library and in the Special Collections at UCLA.

Eleanor Swent, Project Director
Knoxville District/McLaughlin Mine
Oral History Project

February 1998
Regional Oral History Office
The Bancroft Library
University of California, Berkeley

Knoxville District/McLaughlin Mine Oral History Project

William Humphrey, Mining Operations and Engineering Executive for Anaconda, Newmont, Homestake, 1950 to 1995, 1996

William Wilder, Owner of One Shot Mining Company: Manhattan Mercury Mine, 1965-1981, 1996

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume I, 1998

Anderson, James, "Homestake Vice President-Exploration"

Baker, Will, "Citizen Activist, Yolo County"

Birdsey, Norman, "Metallurgical Technician, McLaughlin Process Plant"

Bledsoe, Brice, "Director, Solano Irrigation District"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume II, 1998

Cerar, Anthony, "Mercury Miner, 1935-1995"

Ceteras, John, "Organic Farmer, Yolo County"

Conger, Harry, "President, Chairman, and CEO, Homestake Mining Company, 1977 to 1994"

Corley, John Jay, "Chairman, Napa County Planning Commission, 1981 to 1985"

Cornelison, William, "Superintendent of Schools, Lake County" (Includes an interview with John A. Drummond, Lake County Schools Attorney)

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume III, 1998

Crouch, David, "Homestake Corporate Manager-Environmental Affairs"

Enderlin, Elmer, "Miner in Fifty-Eight Mines"

Fuller, Claire, "Fuller's Superette Market, Lower Lake"

Goldstein, Dennis, "Homestake Corporate Lawyer"

Guinivere, Rex, "Homestake Vice President-Engineering"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume IV, 1998

Gustafson, Donald, "Homestake Exploration Geologist, 1975-1990"

Hanchett, Bonny Jean, "Owner and Editor, Clearlake Observer, 1955-1986"

Hickey, James, "Director of Conservation, Development, and Planning for Napa County, 1970 to 1990"

Jago, Irene, "The Jagos of Jago Bay, Clear Lake"

Jonas, James, "Lake County Fuel Distributor"

Koontz, Dolora, "Environmental Engineer, McLaughlin Mine, 1988-1995"

Knoxville/McLaughlin Interviews in Process:

Ingle, Hugh, Jr., "Mining Engineer, 1948-1998"
Krauss, Raymond, "Environmental Manager, McLaughlin Mine"
Kritikos, William, "Operator, Oat Hill Mine"
Landman, John, "Rancher, Morgan Valley"
Lyons, Roberta, "Journalist and Environmentalist"
Madsen, Roger, "Homestake Mechanical Engineer"
Magoon, Beverly, "Merchant and Craft Instructor, Lower Lake"
McGinnis, Edward, "Worker at the Reed Mine"
McKenzie, Robert, "Photographer and Local Historian, Napa County"
Moskowitz, Harold, "County Supervisor, Napa County"
Onstad, Marion, "Morgan Valley Rancher, Homestake Secretary"
Parker, Ronald, "General Manager, McLaughlin Mine, 1988-1994"
Purtell, Patrick, "General Manager, McLaughlin Mine, From 1994"
Stoehr, Richard, "Homestake Vice President and Director"
Strapko, Joseph, "Homestake Field Geologist"
Thompson, Jack, "General Manager, McLaughlin Mine, 1981-1988"
Thompson, Twyla, "County Supervisor, Yolo County"
Tindell, Avery, "Capay Valley Environmentalist"
Turney, John, "McLaughlin Metallurgist: Pioneering Autoclaving for Gold"
Underwood, Della, "Knoxville Rancher, McLaughlin Mine Surveyor"
Wilcox, Walter, "County Supervisor, Lake County"

x

Regional Oral History Office
The Bancroft Library

University of California
Berkeley, California

Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

Donald Gustafson

HOMESTAKE EXPLORATION GEOLOGIST, 1975-1990

Interviews Conducted by
Eleanor Swent
in 1993

Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

All uses of this manuscript are covered by a legal agreement between The Regents of the University of California and Donald L. Gustafson dated March 5, 1993. The manuscript is thereby made available for research purposes. All literary rights in the manuscript, including the right to publish, are reserved to The Bancroft Library of the University of California, Berkeley. No part of the manuscript may be quoted for publication without the written permission of the Director of The Bancroft Library of the University of California, Berkeley.

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It is recommended that this oral history be cited as follows:

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Copy no. _____



William Wilder and Donald Gustafson, ca. 1985.

INTERVIEW WITH DONALD GUSTAFSON, HOMESTAKE EXPLORATION GEOLOGIST,
1975-1990

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INTERVIEW HISTORY--Donald L. Gustafson

Donald Gustafson was hired as an exploration geologist for Homestake in 1975 when the company began an intensive search for world-class deposits of gold. He is generally credited with chipping out the sample at the Manhattan mercury mine which launched the McLaughlin Mine project. In the introduction for the oral history of James William Wilder, Gustafson wrote, "The reason for visiting the Manhattan mercury mine was to determine if any anomalous or significant gold values were associated with the mercury mineralization, a geologic concept I had developed, the mercury-hot springs-gold model concept. I was examining numerous historic mercury mines in the area and a literature review indicated the Manhattan Mine might have favorable characteristics that would prove my concept."

By 1992 when I called him at his home in Reno, Gustafson no longer worked for Homestake, and was busy with consulting jobs in places as diverse as Namibia, Kurdistan, China, Venezuela, and remote areas of Nevada. In March 1993 he accepted the invitation to participate in the oral history project and he managed to arrange for two interviews, both at my home in Piedmont: on 5 March 1993 and 23 September 1993.

Don Gustafson, trim, blond, and blue-eyed, looks younger than his years. He was born in 1938 and grew up in Illinois in the house which had been the family home for three generations. His only connection with earth sciences was working in the gravel pit of his father's ready-mix business. He earned both bachelor's and master's degrees at the University of Colorado. He married his high school sweetheart Marilyn while he was a student; they are still married to each other. She has been a music teacher in the schools wherever they have lived. He worked for the USGS [United States Geological Survey] and for ten years as a mine geologist for Anaconda Company in Nevada and Montana before joining Homestake. He says of exploration geology that it "really all boils down to a lot of common sense and a lot of patience."

Working out of an office in Reno, he explored mostly in Nevada and then at Bodie, California, where he says the new concept of a mercury-hot-springs-gold association was triggered. He tells of looking through Homestake files from many decades to sort out promising prospects. After investigating eighty-eight different mercury mines, he went in February 1978 to the Manhattan Mine of the One Shot Mining Company owned by Bill Wilder. His first visit resulted in samples which were "pretty darn significant."

Gustafson recalls the intricate negotiations which culminated in acquiring and developing the property. He tells of representing the project in a series of public meetings, seeing it through obtaining the

permits, and in 1982 handing it over to Homestake's operations group. He says although they were "extremely hectic" years, "I enjoyed it because it was a success; I would do it again."

The tapes of the interviews were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Gustafson for review in December 1993. He reviewed it thoroughly and returned it with a number of changes for clarification of details. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The Donald Gustafson interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1996, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent, Project Director, Research
Interviewer/Editor
Regional Oral History Office

The Bancroft Library
Berkeley, California
May 1998

Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name DONALD LEE GUSTAFSON

Date of birth July 8, 1938 Birthplace Princeton, Illinois

Father's full name Flexd D. Gustafson

Occupation RETIRED Birthplace Tiskawa, Illinois

Mother's full name Marjorie A. Gustafson

Occupation Retired Birthplace Walnut, Illinois

Your spouse Marilyn Ruth Gustafson

Occupation Retired Birthplace Princeton, Illinois

Your children DAWN Marie Welsh, Kimberley Kay
Gustafson

Where did you grow up? Walnut, Illinois

Present community RENO, NEVADA

Education BA Geology/Mineralogy University of Colorado
MS Geology University of Colorado

Occupation(s) Geologist

Areas of expertise Exploration for precious metal and base
metal ore deposits.

Other interests or activities GOLF, TENNIS

Organizations in which you are active SEG (Society of Economic Geologists)
And SME (Society of Mining Engineers and Exploration Geologists)

INTERVIEW WITH DONALD GUSTAFSON

DONALD GUSTAFSON, HOMESTAKE EXPLORATION GEOLOGIST, 1975-1990

[Interview 1: March 5, 1993] ##¹Growing up in Walnut, Illinois

Swent: All right, Don, let's just begin by your telling where you were born and a little bit about your early beginnings.

Gustafson: Well, Lee, I was born in northern Illinois, in a small farming community called Walnut, Illinois, south of Rockford and north of Peoria. My mother and father are of Swedish and English descent and I lived with my mother and father and my grandmother and her son, in her house. I have one sister, named Nancy, who currently lives in Des Moines, Iowa, is married to a doctor, Jim.

I went to school in Walnut Grade School, Walnut High School and graduated in 1956 and decided to be very adventuresome and go to the University of Colorado, which I did for two and a half years. And then, because of a desire to return to my high school sweetheart, I went to the University of Illinois and reestablished my relationship with her. She and I were married in 1960 and returned to Colorado shortly afterwards.

Swent: This is the wife you still have.

Gustafson: That's the wife I still have.

Swent: Good. So there wasn't any mining or geology particularly in your background?

^{1##} This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcripts.

Gustafson: No, my father owned a trucking company and a ready-mix company, both in northern Illinois.

Swent: He was not a farmer.

Gustafson: No, we lived in the big city of Walnut which was, at that time, a thousand people, but it was very farming oriented, with farmers around the little village.

No, the only really contact I had with mining which--I guess you could call it mining--is the ready-mix business that my father owned.

Swent: Minerals, anyway.

Gustafson: There was a gravel pit, which is where I worked quite a bit during my high school years. I was in the gravel pit, helping with the ready-mix business so, to a certain extent, that was mining oriented. I always liked the outdoors though, so that's, I guess, one reason for getting into a profession that is pretty much outdoor oriented.

University of Colorado, 1956-1965

Swent: Was Colorado where you first came in contact with geology?

Gustafson: I actually started out in engineering and was in engineering that first year. The real reason I got into geology is that the dorm supervisor, who was a graduate student (but he lived in the dorm and supervised the dorm), was a geologist. And all he could talk about was being a geologist and how great it was and how interesting it was. So after one year of engineering, I decided I would switch over to geology. And that's the real reason that I went into geology, he just talked about it constantly.

Swent: What was his name?

Gustafson: I have no idea. I never really even knew him that well. He just, you know, you'd be waiting in line to go eat in the dorm and he'd be talking about geology. He was so enthusiastic about it. So second year of college I switched over to geology. And then when I was at University of Illinois I actually took a year of business at that time. But then went back to Colorado and went back into geology.

Swent: You graduated from Colorado.

Gustafson: Yes. Got my bachelor's in 1963 and my master's in 1965, from Colorado.

Swent: Were there any teachers that were particularly influential or outstanding that you'd like to mention?

Gustafson: Oh, I think probably the one that sticks in my mind would be Dr. Larry Warner. He taught mineralogy and structural geology and he was somewhat instrumental in pushing my career. Also, Dr. Ernie Walstrom, who was my thesis advisor, and he was quite helpful and supportive. As I said, those two, as far as college professors, are ones that really stand out.

Swent: This is at Boulder.

Gustafson: Yes, University of Colorado, Boulder. Dr. Larry Warner's the one that I actually kept up a small relationship after graduating; I used to see him at different times.

Swent: What did you do in the summer?

Gustafson: While I was in college I went back to Illinois and worked for my father, pouring ready-mix concrete [laughter], mainly because my wife, Marilyn, was also from the small town of Walnut. We were high school sweethearts. And so we always wanted to go back to see the parents in the summertime, and it was very convenient to go back and work for my dad. And also, we had our oldest daughter, Dawn, and that was a chance to take her back to Illinois so she could get to know the grandparents.

Swent: She was born when you were still a student?

Gustafson: Yes. She was born in '61 and actually, we had her in Boulder for four years. We lived in Denver for a year; Marilyn got a job in Denver teaching music. I worked for the USGS [United States Geological Survey] for a year. And went to night school at University of Colorado in Denver.

Swent: What sorts of courses were you taking then?

Gustafson: I took historical geology and Spanish and physics. They were still undergraduate courses.

Actually, I was trying to establish residency and I thought, "I'll work for a year," but I wanted to go to night school at the same time, so I worked full-time with USGS and went to night school. Well then, when I applied for residency,

the one semester I had taken ten hours, and they said, "No, if you take over six hours in one semester, we consider you here for educational purposes, and not to establish residency," so they wouldn't give me in-state tuition. And that was the real reason for doing it was to establish residency.

Swent: That's a Catch-22, isn't it?

Gustafson: Yes, but it didn't work, so I had to pay out-of-state tuition, which, at that time, wasn't that much, but it was significantly more than the in-state tuition.

Swent: What sort of job did you have at USGS?

Gustafson: I was a cartographic aide; I helped make the base maps for topographic maps.

Swent: Was this good training?

Gustafson: Well, it was mostly a drafting job, and calculating coordinates. Field people would go out and survey in points on a map and then we would have to calculate them out and put them on the base map. It was just the first stages of making a topographic map and all we drew on the map were latitude, longitude lines, grid points, and control stations.

Swent: Not really creative work.

Gustafson: No, just on a blank piece of paper. We just calculated the data and put it on for the different topographic maps. But it was interesting.

Swent: You didn't go back to USGS, though, later.

Gustafson: No, that was my only experience with a government job and would be my last.

Swent: You learned what you did not want to do?

Gustafson: I won't say anything against the government. [sighs] They had their problems.

Swent: Didn't turn you against geology, anyway.

Gustafson: No. That's true. Well, it would have been all right to work for the USGS, but mining companies were more exciting.

Swent: Did you do any field trips or summer jobs that influenced your career?

Gustafson: No, not while in school. Went on a field trip to Mexico at one point in time and then had summer field camp for six weeks between undergraduate and graduate school, but I did not work in any jobs related to geology while I was in school, which is a little bit unusual.

Swent: Yes, it is.

Gustafson: I had a chance, at one point, with the USGS, to go to Elko, Nevada, and spend the summer and work for them. But it was really the financial aspect of it: number one, I had a family, so we would have had to go to Elko and live, which would have cost us money and the pay wasn't that great with the USGS. So we went back to Illinois, lived with my wife's mother, made a lot more money and it did not cost us as much. And that was really the driving force there, to make as much money in the summer so we could get through the next year, was what it amounted to.

Swent: So when did you get your master's degree?

Gustafson: In 1965.

Swent: In '65. I'm trying to think what was going on in mining and geology then. Nevada was booming, wasn't it?

Gustafson: Well, '65 was the big porphyry copper boom in the West; Arizona and Nevada. So I went to work for Anaconda.

Swent: How did you happen to get that job?

Gustafson: Just sending out letters and got a response from Jim Wilson, who was probably one of the instrumental people in my life, since I went to work for him right out of college.

Swent: What was his position?

Gustafson: He was exploration manager for Nevada, at that time, for the Anaconda Company. But it was just through, you know, sending out resumes as I was graduating.

Swent: You had no personal contact person. No teacher helped you, or--

Gustafson: No, no.

Swent: Just wrote letters blind, and--

Gustafson: Yes, because going to the University of Colorado at Boulder, there weren't that many mining people. There were more petroleum opportunities in 1965 than mining opportunities. And the University of Colorado at Boulder is more of a petroleum school. So there wasn't too much help from them, from the professors, so it was a matter of blanketing the mining industry with letters and seeing what came out of it.

Swent: You were trying for mining, as opposed to petroleum?

Gustafson: Right. I had geared my courses towards the mining profession. More mineralogy and mapping techniques, rather than the petroleum aspect of the job.

Swent: You said you had studied Spanish and business as well, so you could have gone to Latin America.

Gustafson: Yes, though that just really wasn't the thing to do at that time, not like it is in today's world. And the year of business that I took has been very helpful along the way. As you get older, you get more removed from the actual geological aspects of the business and more into the business aspects.

Mine Geologist at Yerington, Nevada, 1966-1971

Swent: So your first job, then, was starting out with Anaconda in '65.

Gustafson: In Reno, Nevada. So the three of us moved to Reno in June of '65, Marilyn, Dawn, and myself.

Swent: And have you stayed there ever since?

Gustafson: No. We lived in Reno from June of '65 until September of '66 and then Anaconda transferred us to Yerington, Nevada, which was an open-pit copper mine, ninety miles southeast of Reno. We moved there in September of '66, right after our second daughter, Kimberley, was born. She was born in July of '66. And then we moved to Yerington and lived there until July of 1971.

Swent: Was Marilyn teaching still?

Gustafson: She taught on and off. She taught our first year, she substituted our first year in Reno. And then we moved to Yerington. She did not work, as I recall, the first year, and then she did a lot of substitute teaching. And she taught one

full year when we were in Yerington. And she's essentially been teaching ever since.

Swent: And is still teaching.

Gustafson: And is still teaching, right.

Swent: I'm sure she's a wonderful teacher.

Gustafson: She enjoys it and she does a very good job.

Swent: Music.

Gustafson: Music. That's right.

Swent: Did you ever run into Vin Perry?

Gustafson: Oh, yes.

Swent: I interviewed him.¹ He told about the Yerington exploration work that he did there. He's a lovely man.

Gustafson: Oh, charming person. I gave him a tour of the McLaughlin Mine in 1988 or '89. He was on his way to Monterey and wondered if he could stop by. He wanted me to take him through the McLaughlin Mine. So I did.

Swent: A remarkable man.

Gustafson: When did you interview him? Recently?

Swent: In 1990.

Gustafson: But as far as you know he's still doing fine?

Swent: Oh, yes. In fact, he was in Tucson this winter visiting people just last month. He was still traveling from New York to Tucson.

Gustafson: Yes, and he has a sister in Monterey that he visits every spring.

¹Vincent D. Perry, A Half Century as Mining and Exploration Geologist with the Anaconda Company, an oral history interview conducted in 1990, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1991.

Swent: Yes, I was able to interview him when he was out here visiting his sister. He was just as bright as could be.

Gustafson: Sharp as a tack.

Swent: Yes, and in good physical condition, too. Amazing man. So when I hear of Yerington, I always think of him. It was well established by the time you were there.

Gustafson: Yes, it started producing in 1952 and I went there in '66, so it was well established.

The Anaconda Mapping System

Swent: What sort of thing were you doing?

Gustafson: I was mine geologist, involved with pit mapping and supervising the drilling activities within the pit and, actually, learning how to be a geologist at that point, with Anaconda's training that they had. Learning how to map, how to log core (map core).

Swent: They had everything very systematized, didn't they?

Gustafson: Right, which was good. Each individual did things more or less the same, so you could look at one person's report or map and know exactly what they were talking about. So it was a good system.

And then I got involved in exploration within the Yerington district and also was involved in exploration near Tonopah, Nevada, at the Hall molybdenum property. Spent quite a bit of time there also handling the drilling activities, logging core, doing what geologists do. It was a combination, at Yerington, of some exploration and some mine geology.

Swent: Was this still the system that Reno Sales set up?

Gustafson: It was pretty much the same, although when John Hunt came in, there were a lot of fine-tuning and refinements to the system. Reno Sales was very adamant about reporting details and used very few colors; at that time they didn't have the colored pencils that we did in the sixties. So we got into less writing and more using colors; each Anaconda geologist knew what orange was and what red was, this sort of thing. So there could be more of a graphic description, and less of a written

description. But certainly along the same lines that Reno Sales started, but with just fine-tuning to the system.

Swent: Did you map on the spot, or did you make notes and go back to the office and finish your map later?

Gustafson: No, always mapped right on the spot. Contrary to what some people do, but the Anaconda system was that you map right there, whether it's surface mapping or logging core or pit mapping or underground mapping. You make your map right there and it's basically a finished product when you get done. You always then had to post it onto linen, at that time. Nobody knows what linen is anymore, but--

Swent: Tell us what it is.

Gustafson: It's just a transparent drafting material that actually is a linen cloth, but it's been starched, so it's relatively stiff, kind of like wax paper. But you can write on it and it does have the linen fibers in it.

Swent: You did your map, in the field or at work, on a thin paper?

Gustafson: No, on a normal piece of relatively heavy paper. But then that would only be of a small portion of the open pit that you were working on. Then you would take it back to the office and transfer it onto a much larger sheet of linen, so you could put it all together.

Swent: And that's laid out on a table, and several people come in with the pieces on it?

Gustafson: Yes, whoever happens to be working at the mine at that time.

Swent: So you would transfer yours to that, tracing it?

Gustafson: No. The Anaconda system was that you had to map on one scale and transfer it onto the office map at a different scale. And the reason for that is then you would pick up any errors that you may have made when you were mapping. So if you had to transfer it at a different scale, in that transferring process of changing scales, you could detect any errors, rather than just straight copying. If you just straight copied it, then you wouldn't have any way of questioning what had happened.

So that was the Anaconda system, which didn't last as long as Anaconda did, because I think people got kind of tired of doing it that way. But that was particularly true in Butte,

Montana. We mapped on one inch equals forty feet, and then we had to post the final maps at one inch equals fifty feet.

Swent: Just a little bit different.

Gustafson: A little bit different, but enough that it was kind of painstaking.

Swent: You said nobody knows what linen is today. What do they use today instead?

Gustafson: They use mylar, which is a plastic type of material. Linen had a problem: as it would get humid, it would stretch and as it got dry it would shrink. It wasn't very stable, whereas mylar is essentially the same size under all conditions.

Swent: You drew directly on the linen.

Gustafson: Right.

Swent: With the same colored pencils?

Gustafson: Well, used colored inks. You know, with the old quill pens. A bottle of ink and a quill pen.

Swent: Several bottles of ink.

Gustafson: Yes. Red and blue and orange and pink and--

Swent: A quill pen?

Gustafson: Yes.

Swent: That's amazing.

Gustafson: And that wasn't that long ago.

Swent: Didn't have to wear knee britches and a powdered wig, did you? [laughter]

Gustafson: No, but we used a little quill pen when we posted our maps in Butte. You know, now they use Rapidographs or something like that. They hadn't changed the system up there for quite a few years. But it was good training. Things that you don't forget. The people in today's world really don't understand the basics of geology, of mining geology, and that sort of thing. They're more up-to-date and modern, I guess, but it's nice to know the basics, too.

Swent: Yes. So when you were working at Tonopah, you were still living at Yerington? Did you move to Tonopah?

Gustafson: Well, most of the time I worked at Tonopah was actually that first year that we were in Reno.

Swent: I see. You never moved to Tonopah.

Gustafson: No. But that was--this is going to make me sound like I'm awfully old, I'm not really that old--that was back in the days when we had to work five and a half days a week. I would leave Reno Monday morning, drive to Tonopah (which was a five-hour drive), work until Saturday at noon, and then drive home (which was another five-hour drive), and then turn around Monday morning, go back and do the same. Did that for six months.

Swent: And Marilyn would sit at home with two little ones.

Gustafson: Well, just the one at that time. But then after doing that for six months and being other places in the meantime, we decided we'd be better off to go to Yerington, where I could be home. And when that opportunity came up, boy, we jumped at the chance to go to Yerington, which was good.

Underground Experience at Butte, 1971-1975

Swent: But then you did move to Butte.

Gustafson: Then we moved to Butte in July of '71 and spent four years up there.

Swent: Were you still working under Jim Wilson then?

Gustafson: No. Actually, in the meantime, Jim had moved to Australia in about '68, maybe '69, and then we were reporting to John Hunt in Salt Lake. He was in charge of western exploration and, finally, he was in charge of all of Anaconda's exploration under Vin Perry. Jim left in about '68 and moved to Australia.

Swent: Were you given a choice about moving to Butte?

Gustafson: Oh, I requested it. I wanted to get the underground mining experience, which I felt that every good geologist should have. And Butte was one of the last places where you could get underground experience in the U.S., with the exception of the Homestake Mine. So I asked to be transferred to Butte. Spent

four years there working underground at three of the underground mines.

Swent: Which mines did you work at?

Gustafson: The Mountain Con and the Kelly and the Leonard.

Swent: Famous old mines.

Gustafson: Yes, they were all interesting.

Swent: And there was still mapping to do? They hadn't all been mapped and remapped by then?

Gustafson: Oh, yes. Well, every time they had a new drift or a new cross-cut, the geologist had to go map it and then hopefully guide the miners to the ore, which was our job, to keep track of where the veins were and help them find new veins or faulted offset portions of the veins.

##

Swent: Did you feel you were following ancient tradition?

Gustafson: Not an ancient tradition, but just following tradition that you were really doing things the same way they'd done them for years except for the modifications in the mapping.

Swent: What was Butte like in those days?

Gustafson: Well, the people were great. The winters were long. The summers were short. The spring and the fall were actually quite nice, but relatively short periods of time. We met a lot of good people in Butte. We didn't like the winters, although we skied a lot at that time. With the girls growing up, we skied a lot.

And really the winters weren't that bad; it was the spring that was miserable, you know, because spring never came; it just was more winter, so we got a little tired of that. And after four winters of that we decided it would be time to go do something else. And that was at the time when Anaconda was having its problems, economic problems. Anaconda wasn't the same old Anaconda that it used to be.

Swent: What about the labor situation there? How was it then?

Gustafson: Well, the unions controlled the company, which was unfortunate. And they always had their strike, I guess every three years, so

they had one strike while we were up there that lasted maybe six months. The unions were the downfall of the Anaconda Company in Butte, because they were so strong. They needed to do something about that, but they really couldn't.

Swent: Did this affect your work at all?

Gustafson: No, not really. Like I said, the four years that we were there they only had the one strike; of course, we didn't have to go underground during the strike because they weren't operating, but it didn't really affect our work in the geology department.

Swent: Your contact with the miners was not affected by this?

Gustafson: No. The miners just kind of--well, they expected a strike every three years and thought, "Well, now we'll get a vacation for six months or nine months," whatever it was, and so they planned for that and anticipated that they were going to strike every three years. I'm sure, in reading books, it used to be different than that, but when we were there there really wasn't any conflict between the miners and the salaried people.

Swent: You didn't feel a big tension there.

Gustafson: No, I really didn't. Like I said, it probably used to be different than that, but not when we were there.

Swent: Where did you live?

Gustafson: We lived down in the flat, what they called the flat, away from the downtown area. It was kind of a new area, relatively new area. Old Butte's kind of built on a hill; of course everybody had to have their house right next to the mine shaft when underground mining was the only method of mining there. And then when they put in the big Berkeley Pit, which destroyed a lot of the old houses, like the old town of Meaderville, people moved out onto the flat, and that's where we lived. It was interesting. But then we moved to Reno in '75. And that's when I went to work for Homestake Mining Company.

Hiring On at Homestake's Reno Exploration Office

Swent: Did you have a job at Homestake before you moved?

Gustafson: Yes.

Swent: How did you get that?

Gustafson: Through a good friend of mine, Ken Jones, who had gone to work for Homestake the first of 1975. And then in the spring of that year when Homestake was going to move their office from Tucson to Reno and start up a gold program (they'd been looking for copper in Arizona), and because of the increase in the price of gold, they decided that they would start looking for new gold deposits.

So they were going to open up a Reno office and Ken Jones called me and asked me if I would be interested in going to work for Homestake Mining Company. This was in the spring of '75, and I said, "Well, yes, I would be interested." He knew I was kind of looking for a job anyway, to get out of Butte. And he said, "Well, Gail Hansen," who was in the San Francisco office, "would like to talk to you." So I went to San Francisco and talked with Gail Hansen, went out and had lunch with Gail and Henry Colen, and at the end of the lunch, they offered me a job.

Swent: Sounds easy.

Gustafson: Yes, worked out all right. And that was in like April and they wanted me to come right away but I wanted to stay with Anaconda until July so I could get my ten years and become vested with the company. So we stayed in Butte for another three months and then moved to Reno in July, first of July of '75 was when we moved to Reno.

Swent: In 1975 the concept of microscopic gold was already well established, wasn't it?

Gustafson: Well, Carlin was the only one that I can think of that was actually operating. And the price of gold was still around eighty dollars. They had gone off the fixed thirty-five-dollar price in '71 or something like that. But gold hadn't really jumped up to astronomical amounts at that time. So really companies weren't exploring for gold in '75. I mean, there were a few, a little effort, but nothing like the increase in the price of gold in '78-'79 precipitated when everybody was out looking for gold. In '75, it had to have been less than a hundred dollars an ounce, probably significantly less than a hundred dollars an ounce.

Carlin was certainly known, because of its discovery in the early sixties.¹ I'm trying to think who was really looking for gold in '75. There were some companies, but not very many at that point in time. Homestake had an edge on them.

Swent: Do you know why Homestake was particularly looking?

Gustafson: Just because of their history as a gold producer and they wanted to maintain that prominent position.

Swent: Was it a more philosophical motivation than economic? Is that fair to say, that they wanted to reestablish themselves as a major gold producing company?

Gustafson: Right, because they had uranium at that time, which was quite successful. Had the Buick Mine in Missouri, which was quite successful.

Swent: And that was lead, lead-zinc.

Gustafson: Right, lead-zinc. Mostly lead. But there was certainly some truth in that, two or three years later, that they wanted to establish themselves as the premier gold-producing company in the U.S.A., or in the world, but particularly in the U.S. They had just gone into Australia, at Kalgoorlie, which was just happening about that time.

Swent: And was that gold?

Gustafson: Yes. That was gold. That's an interesting story.

Swent: Were you involved in that?

Gustafson: No, no. Do you know Andy [Orville] Anderson?

Swent: Yes.

Gustafson: Talk to Andy about that. It was quite interesting.

Swent: In what way?

Gustafson: Well, just the type of deal that Homestake structured with Western Mining on that, which was risky to a certain extent, but it turned out to be an exceptionally good deal. Number one, the price of gold went up and they were able to not put up any money actually, because the mine paid for itself due to the

¹John Livermore, interview in process.

increase in the price of gold. I don't know the details on that at all, but in talking with Andy, he's got an interesting story to tell about that. That was a good investment. They really didn't have to put up any money is what it amounted to.

But back to your question about microscopic gold, yes, it was known at that time. And the Carlin sedimentary-hosted type gold deposit in Nevada was the type example. But there was not a lot of gold exploration in 1975.

Swent: This is what you were hired to do.

Gustafson: Yes, strictly gold exploration.

Swent: Did you have experience in this?

Gustafson: No, because I had always looked at copper mines, or worked in copper exploration. But, in geology, as far as I'm concerned, it doesn't make too much difference--well, it does make a difference--but if you're looking for copper or gold, there are so many similarities in the way you go about it. You may be looking for different alteration types, or maybe looking for different rock types, but the approach is the same to exploration.

Swent: Which is?

Gustafson: A lot of common sense. You know, being able to recognize the right--I'll say regional setting, the right host rock, the right alteration, taking samples in various localities and analyzing them for the right elements. It's interpretation of structural trends. Just a lot of factors that come into it that really all boils down to a lot of common sense.

Swent: A lot of patience, too, I think.

Gustafson: And a lot of patience. Being in the right place at the right time. But that was an advantage that I always felt that I had in that I worked at an operating mine, or two operating mines--Yerington and Butte--and that you see an ore body, an economic ore body, firsthand and work with it for several years.

So you get a feel for what an ore body really is, rather than so many people that just walk over the surface all their lives and come up with these ideas: "There may be something down there," but really not being able to visualize what they're looking for. I've always felt that a person, to be a good exploration geologist, should have a lot of years of operating mine experience before going into exploration. And

then you're better equipped to screen out the good from the bad, the wheat from the chaff sort of thing, when you are looking at the surface.

I've always--in fact with Homestake, trying to hire people, I was trying to get people with mine experience. It was hard to do because most people, even back in '78, '77, they didn't want to work for a mine; they wanted to go into the romantic aspect of exploration, which I'm not sure was the right approach. But that's what most people wanted to do.

Swent: You worked for Anaconda for ten years. What sort of organizational structure did they have?

Gustafson: I was the mine geologist. The structure in Butte, when I was there, there was a chief geologist, who reported to, kind of a dual reporting, to the general manager of the operation, but he also had some liaison with John Hunt, who was in Salt Lake at that time, and people prior to him. But their first concern was the operation, was reporting to the general manager for the chief geologist.

Swent: So you gave your mapping results to the chief geologist who, in turn, consulted with an operating superintendent, who then told the miners what to mine?

Gustafson: No. Each mine geologist worked directly with the mine superintendent, so you had the chief geologist and you had the mine superintendent. Then you had the mine geologist, who actually reported to the chief geologist, but on a day-to-day basis, if he was working at the Mountain Con Mine, then he worked with that mine superintendent on a day-to-day basis.

Swent: So what you came up with in your mapping determined where they mined and what they mined.

Gustafson: Exactly.

Swent: The grade as well as the location.

Gustafson: Right. And where they would do development work, too. They did some drilling, short holes underground but not a whole lot, because of the vast data that was available.

And it was interesting in that when you go in as a mine geologist the first day, and it's probably true of most mine superintendents, they look at you and they say, "Oh, what in the world do I need him for? He doesn't know anything. He's just a thorn in my side." So you have to establish a rapport

with them, which takes a while to do. And of course the best way you can do that is work with them on a daily basis and try to convince them to do something that will find them some ore, which is what I was able to do at the Mountain Con, after maybe being there six months. I figured out some things and went in and talked with the mine superintendent, who turned out to be a real good friend later.

Swent: What was his name?

Gustafson: Swen Swendseid. O.R. Swendseid, but they called him Swen. He recently passed away, last fall sometime. But anyway, I finally convinced him to drive a little cross-cut out to this one area and see if they could find a vein, which they did, and which they mined on for more than a year.

Swent: That always makes the geologist look a lot better.

Gustafson: Oh yes, and then, after that, he wouldn't do anything without talking to me. He said, "Oh, let's talk to Don. We'll find out if we can do that or not." So you just have to work with them and establish your position in life, I guess, is what it amounts to. But it was fun. Yes, he turned out to be a real good friend.

Swent: So when you went to Homestake, then, you were going into something quite different, actually, weren't you?

Gustafson: Well, it was a different commodity and it was more pure exploration than what I had been involved in. That's exactly right.

Swent: And you were working then under Gail Hansen?

Gustafson: Under Ken Jones. I worked for Ken Jones in the Reno office. Ken was in charge of the Reno office. Gail was manager of exploration in San Francisco, who reported to Henry Colen, who was also in San Francisco.

Swent: So they hired you, but Ken must have recommended you.

Gustafson: Right. They just had to pass their blessing, I think, because Ken Jones and I had worked together with Anaconda. So we went back a long ways. In fact, when we moved to Reno in '65, he moved to Yerington, so I basically took his job in Reno and then he went to Yerington. And then when we went to Yerington in '66 I worked for him at that time. Then he left a year or two later, went to Tucson. But then we got back together in '75, is what it amounted to.

Swent: Was the pay scale similar for Anaconda and for Homestake?

Gustafson: Very similar, within--

Swent: Do you want to say how much you were making?

Gustafson: Well, I'm not sure I can remember what I was making with Anaconda, but I wanted \$25,000 to go to work for Homestake. In fact, I wrote that down on my application that they had me fill out before we went to lunch, and after lunch Gail came in and he said, "Boy, I'd really like to be able to pay you \$25,000, but we can't, but if you change that to \$24,000," he said, "we'll hire you." So I started at \$24,000. I might have gotten a \$2,000 a year raise from Anaconda's salary.

Swent: Were the living costs comparable at Butte and at Reno?

Gustafson: Similar. Well, Reno was higher, although you didn't have the state income tax that Montana has. It was very similar.

Swent: And a more attractive place to live, maybe?

Gustafson: Oh yes. Weatherwise it was much nicer.

Swent: What about the schools? Was this a factor?

Gustafson: Probably a consideration, but I would say that the schools were respectable in Butte. We didn't have any real problem with the schools.

Swent: It was mainly the weather that got to you?

Gustafson: Yes, the weather. Well, the biggest problem at that time was just the unrest within the company. Anaconda was just teetering at that time.

Swent: And you could tell, you knew it?

Gustafson: Oh, yes. And particularly, being in operations, because the general manager would change every two or three months and you never knew who was going to be on top. It was a very stressful time. And you could see the handwriting on the wall that something was going to have to break. So it was a good time to get out. And of course, after that, Arco took over, which was good for Anaconda for a while.

Swent: We are continuing here after a long break. You've been to Kurdistan and back since we last talked and now you're getting ready to go off to China, but maybe we can think about 1975 and California and get your thoughts back to that.

Gustafson: That's always an easy thing to think about.

Swent: When we stopped you had just hired on with Homestake, you had had lunch with Gail Hansen and Henry Colen and you had moved to Reno.

Gustafson: That was July of '75.

Swent: Was Homestake changing its focus somewhat?

Gustafson: Well, they were getting ready to increase their exploration efforts for gold because of the increase in the price of gold. And that's when they moved their office from Tucson to Reno, middle of 1975. Ken Jones was in charge of the office in Reno. Tom Kuhl moved up from Tucson with Homestake. Frank Howell was there as a part-time employee. He was going to school half time, working towards his degree in geology; it took him two or three years to finish up.

So there were a total of four of us in the office and we hired a secretary, Nancy Martinelli. We were a very small, close-knit group. Of course, the entire exploration group for Homestake at that time was very small. They did have their Denver office, which was Ted Rizzi, who you certainly know. Joe Rankin was there, Ed Kerr--

Swent: Was it in Denver or Lakewood?

Gustafson: It was in Lakewood at that time. Bob Adamson was there, head of uranium exploration.

Swent: Where was the Reno office?

Gustafson: At 35 North Edison Way, just off Mill Street, in the east part of Reno.

Swent: We had talked a little bit about the fact that not very many companies were interested in gold at that time.

Gustafson: No. The price had gone up from the thirty-five-dollar price but was still a little over the hundred-dollar price range. And people were still interested in mainly copper at that time. Homestake was--because of their past experience in gold--one of the first to really go out and look for the lower-grade bulk

minable gold deposits. Of course, Newmont had their Carlin long before that, but that was a unique situation.

Swent: Did you think of it as unique or were you trying to find another Carlin?

Gustafson: Well, certainly, the initial thrust was to find another Carlin, which people like Joe Wargo had looked for in the late sixties. Homestake had an Elko, Nevada, office at that time. And Joe Wargo was instrumental in looking for Carlin-type disseminated gold deposits in Nevada at that time, plus some other individuals who I never met. Joe was very much interested in that type of deposit so even though we say that in '75 Homestake was embarking on a gold program, they had been looking for years and people like Ted Rizzi had been looking around the West for gold deposits for years.

Swent: Carlin was the early sixties.

Gustafson: Right.

Swent: This is a full ten years after that.

Gustafson: Right.

Swent: How do you start out? How do you get from the office in Reno to the Manhattan Mine? Where do you start with something like this? Did somebody tell you where to look?

Gustafson: No. When I first went to work for Homestake in the middle of '75, basically my job, like Ken and Tom, was to evaluate and look for a bulk minable gold deposit in the Western U.S. and we concentrated on Nevada. Of course, the first thing you do is you study the old mines that had been mined in the past, hoping that the old-timers left the lower grade material behind that they couldn't mine, but there would be enough of it to make an economic deposit. So I studied and looked at many, many gold deposits, mainly in Nevada.

Swent: How do you even find out about them?

Gustafson: Through the literature. Nevada Bureau of Mines puts out publications, maps, and they have for years and years. You know, descriptions of the old gold mines, the big ones and the small ones. And there are maps that show you locations and descriptions of the geology and production records as to what they've produced, grade and tons. It's all a matter of public record as to where mining has taken place. The Bureau of Mines has kept a good record of past mining activity so it's a matter

of getting that literature and going out and looking at them. And doing some sampling, doing some mapping, and deciding, is this something that we want to explore further, tie up the land?

Bodie, California, and the Mercury-Hot-Springs Concept

Gustafson: And one of the first projects that we got involved in was Bodie, California, just a few miles from the Nevada border. Ken and I went down and looked at it, in early '76. It was an old one-million-ounce producer of gold, back in the early 1900s. And it looked like you could maybe develop the bulk minable target that we were looking for.

Swent: So it was now a possibility because of the higher price of gold?

Gustafson: And the changes in technology.

Swent: New recovery techniques.

Gustafson: Right.

Swent: Which were?

Gustafson: Well, just refinement of some of the old techniques. Heap leach possibilities, using cyanide more than what they had in the past. And the economies of scale: if you come up with a large-tonnage operation and the economics of scale make it hopefully more profitable.

Swent: Is this partly because of bigger earth-moving equipment?

Gustafson: Exactly. Machinery has changed. And then the price of gold was quite a bit different.

Swent: So this would make a mine that had been defunct look possible, now?

Gustafson: Right. And back in the old days, the miners were looking for half-ounce, one-ounce material and would mine underground, which is really expensive, certainly in today's world, whereas if you go in and look at the .15-ounce-per-ton material on a large scale, the economics change considerably. And that's what we were looking for. We were looking for a million-ounce

deposit of something in hopefully the .1-ounce-per-ton range, so you have a million-ounce deposit.

And Bodie was really the first, as I recall, or was at least one of the first projects that we picked up to evaluate. And that was in the spring of '76. I went down, Frank Howell helped me on that, Tom Kuhl helped a little bit, and we had some technicians from time to time, and did the surface mapping and did a lot of surface sampling. And then we finally drilled some holes in Bodie, which would have been, like the fall of '76.

Swent: Is this diamond drilling?

Gustafson: We actually did a combination of both reverse circulation drilling and diamond drilling, started out with reverse circulation drilling.

Swent: And the technicians that you mentioned were the drillers?

Gustafson: Well, no, we had some technicians or samplers that helped with the sampling of the surface at that time. We opened up some of the underground workings and did some underground sampling also, and actually hired some contractors to open up some of the underground workings and help with the sampling of the underground.

Swent: What kind of samples did they take?

Gustafson: The surface sample was just taken with a geologist's pick. A five- or ten-pound sample which may represent a five-foot interval on the surface.

Swent: Where did you send the samples to be assayed?

Gustafson: At that time we were using Union Assay in Salt Lake City. For most of the assaying work, they were the old standard of the industry, had been around for years. And because gold exploration was kind of new at that time, there weren't the assay labs in Reno that there are now. There was probably one at that time. But they were new and not as experienced as Union Assay in Salt Lake. So we used them.

Swent: Did you have to get permission from the people who owned Bodie, or did you just go in and do this?

Gustafson: We optioned the ground from the Kane family. They live in Bridgeport, California. And it was essentially private land. It wasn't BLM [Bureau of Land Management] ground so we didn't

have to talk with the BLM. They were essentially patented claims. We did stake some unpatented claims ourselves. But in the heart of the district, as I recall, they were all patented claims. I don't think we got any permission from anybody, strange as it may seem in today's world. That's a good question.

Swent: Did you talk to the Kane family, personally?

Gustafson: Ken Jones and I both did. Ken did most of the negotiating.

Swent: You had to pay them something?

Gustafson: Yes. They were paid a monthly rental fee for the right to explore and then there was a buyout clause in the contract, the mining agreement, that if we wanted to buy at a certain date it was half a million dollars, or some actually small amount in today's world compared to what some people are paying. And if it went on longer than that, you paid them maybe \$750,000 if you exercised the option by a certain date. Homestake finally did buy them out, but it was a reasonable deal.

Swent: Did you use a Homestake lawyer for this or did they have their own lawyer? I presume lawyers got in the picture.

Gustafson: Well, I suppose Bill Langston was involved in the initial deal.

Swent: I'm just trying to get a picture of how Homestake proceeded.

Gustafson: Dennis Goldstein might have been. Probably Bill Langston was involved. But back then deals were pretty simple. It was a simple deal. It didn't really involve a lot of lawyers. Homestake really didn't have a land department at that time so it was up to the individual geologist or the manager, like Ken Jones, to negotiate the deal and come up with reasonable terms.

Swent: He was authorized to do that? He could do that on his own?

Gustafson: Well, certainly negotiate the agreement, the general terms and then the legal department would draft up the final agreement and then it would have to be signed by an officer of the company which would have been Jim Anderson. Because Jim came on the end of '75, first of '76, so Jim was involved in that.

Swent: He came in just after you did, then?

Gustafson: Yes. Like six months after I did. The only reason I guess I'd belabor the point on Bodie is that Bodie was one of the prospects that we did quite a bit of work on, that really

triggered the thought of the mercury-hot-springs-gold association.

Swent: Was there mercury at Bodie?

Gustafson: Yes. Not much but there is some cinnabar at Bodie.

Swent: Bodie was a famous old mine; it wasn't any secret.

Gustafson: No. The old town now is a California historical site. It is well preserved and one of the more interesting old gold mining camps to go to because it's in such good shape. At Bodie from a geologic standpoint you have two major structures, north-south trending structures. One is dipping east and the other is dipping west so it forms a graben, which is a down-dropped block in the center which originally was higher and dropped down along these two faults. Within the graben area, there are chalcedonic veins that do contain some cinnabar along fractures and if you reconstruct the geology prior to faulting, the chalcedonic veins with the cinnabar were at a higher elevation than the gold mineralization, which is essentially in the footwall of the two structures. The gold mineralization would have been deeper than the chalcedonic veins and the mercury mineralization when the deposit formed.

So that--plus some other features from other deposits that we looked at--kind of made a person think maybe you could go look at the mercury mines where you have chalcedonic quartz and cinnabar at the surface, and drill through that zone into a gold-bearing zone below the mercury mineralization. And Bodie is a type example, if you reconstruct it back to how it was when it was actually formed.

Bodie has a soft spot in my heart because it did help develop the mercury-hot-springs concept. Looking at many of the other old precious-metal gold camps in Nevada, you would occasionally see some hot springs activity. You would occasionally see some cinnabar.

Swent: This was not true at Carlin, was it?

Gustafson: Well, actually there is some cinnabar north of Carlin. But that's really a different type of mineralized system.

Swent: This was a departure from that?

Gustafson: Right. It was a unique thought, just like Carlin was a unique thought in the sixties. It was a new concept of really where to look for gold deposits, getting you off of the beaten track

where other people had looked for years and years, in Nevada. And the idea was just to go to mercury mining districts, sample the surface, and if you could get any detectable gold at all in the ppm [parts per million] range, that you may have a possibility of developing, or discovering economic gold mineralization below this mercury mineralization in a hot springs environment. The hot springs environment is just telling you that, number one, you have a heat source some place and, number two, you have a plumbing system because the solutions had to get to the surface. And if you have the heat source and the plumbing system, if you have some gold in the system, which is a big question, that eventually you may form a gold deposit.

Swent: Once you had that theory, then you started out on your search?

Gustafson: Well, there was one other thing that really triggered the whole thing again. Homestake had been in the gold mining business for almost a hundred years at that time. And they had accumulated a lot of files from past geologists; exploration geologists had gone out and looked at prospects around the U.S. And people like Gail Hansen and Joe Wargo, and I imagine Ted Rizzi, from time to time had gone through the old files.

Swent: Where were they?

Gustafson: The bulk of them were stored in Lead, South Dakota. Now, the people like Gail Hansen and Joe Wargo, who had reviewed those files, had prioritized them and taken out ones in California and Nevada that sounded interesting and sounded like they might fit today's economics and today's thoughts. And there was a list of maybe fifty prospects, quite a few in southern California that they had prioritized and selected. And we got that box of files in Reno. And I went through that list and went through the reports.

And looking through those there was the Cherry Hill-Wilbur Springs project in California. And this would have now been the middle of 1977. There was the Morning Star in southern California and a couple of other ones that actually became mines that Homestake had looked at years ago. But one was the Cherry Hill-Wilbur Springs gold-mercury deposit which Homestake had looked at in 1925, 1926. A fellow by the name of Bill Yates; does that name mean anything to you?

Swent: There was a manager in Lead named Bruce Yates. Maybe it was the same family.

Gustafson: His name was Bill Yates. Donald McLaughlin knew him from years ago. But in 1925-26 he looked at this property. It had been mined as a gold mine. It had been mined as a mercury mine. And there were active hot springs in the area.

Cherry Hill-Wilbur Springs, Colusa County, California

Swent: This is up in Colusa County.

Gustafson: Yes. Colusa County, California. And their prediction, from that 1926 report based on sampling that had been done, was that there was open-pittable 10 million tons of .08 [eight hundredths of an ounce of gold per ton] on that property. In 1977, that gets one's interest up. Here's a Homestake geologist; he must have been relatively competent and if he thinks there's 10 million tons of .08 there, that you can mine with an open pit, then a person better go look at it. Plus, it had the makeup of gold mineralization, mercury mineralization and hot springs activity all in one place. It was in sedimentary rocks which would be favorable for widespread mineralization. So, I looked at the report, middle of 1977, and with the experience at B.ie and the thought about this mercury-hot-springs association--

Swent: That's fifty years later?

Gustafson: Yes, that's right. It is fifty. I didn't realize it was quite that long. Twenty-six to seventy-seven is fifty-one years, isn't it? I hadn't thought of it in those terms. But that's right. Certainly a person has got to look at this and see if it's really what they say it is. So I went over, found out who the owners were and they were an older couple--

Swent: How do you do that?

Gustafson: Go up to the county courthouse and look in the assessor's records and see who's paying taxes, is what it amounts to. And contacted them, they were in southern California.

Swent: What was their name?

Gustafson: Their name was Weightman. Mr. and Mrs. Weightman. They had 150 acres, which was essentially the mineralized portion of the area. As you go into the Wilbur Springs hot springs, near the spa area, there's a little bridge and they had a phone there; I

actually called them from that little bridge to get their permission to go look at the property.

They were pretty hesitant because they'd had some people in there before and they'd had some mercury miners in there and they kind of botched things up and so they were kind of hesitant to have anybody go look at it. But I finally, you know, convinced them, said I just want to walk over the ground and take a few samples and that sort of thing. And they finally agreed to let me get permission from the people that were leasing the land, which was the Terrel Farms people.

Swent: It was being farmed?

Gustafson: Well, it was cattle grazing. So, Terrel Farms had a lease on it. They actually had a watchman that was there on the property. Terrel Farms had like 10,000 acres around this 150 acres so they just leased it from the Weightmans but they owned all the land around there and had a few cattle on the property.

So anyway, I had to contact them and they would contact the watchman to let me wander around on the property. And this would have been, we're talking September of 1977, is when this all happened. And if you've ever been to Colusa County in September, you know it's hotter than a son of a gun. It's just stifling, it's like being in an oven, little bit of humidity but not much. But just--it was warm. Anyway, it finally worked out that I could go look at it and the watchman that was there was kind of a different individual. He and his wife lived there. And he had a pack of probably a dozen dogs around the little shack where he lived.

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Gustafson: And they were all chained up and they were the meanest dogs I've ever seen. So anyway, you walk on to the property and you see all these dogs chained up and each one trying to get to the other one but they can't because their chains are too short.

Anyway, met him and then looked at the property. And it was exactly as Bill Yates had said. It was sedimentary rocks, mercury mineralization, some alteration, hot springs activity, just everything that he had said was there. And you could actually go back to the original sample sites which were marked with little wooden blocks; the numbers were still there. And I had those maps from his work and there were some underground workings on the property which you could get into.

So, I took thirty or forty surface samples just to confirm that what he said was gold-bearing was actually gold-bearing. I mentioned before, he said there was 10 million tons of .08 there. Well, I took at least forty samples. Went back to Reno, had those analyzed in the lab, averaged up the forty samples, and they averaged .08. And I thought, "Hm. The guy must have known what he was doing."

So, now we're into October of '77 and every fall, the Homestake exploration group had their budget presentations. So, I was really excited and for the budget presentation was going to present my mercury-hot-springs concept. I had an idea, had a concept. But now, and more importantly, I had the Cherry Hill property that proves that you can have mercury-hot-springs and gold in economic quantities all in one place. So, it just couldn't go wrong.

So, had the meeting in Lakewood. My recollection was October of '77. And all the exploration group was there, Gail Hansen, Jim Anderson, Joe Wargo. By that time, the group had built up. Everybody in exploration was maybe twenty-five people, something like that. Ted Rizzi was there. Anyway, I presented my concept of the mercury-hot-springs gold association with a model cross-section showing how it could happen and then presented the data from my initial examination of Cherry Hill, which was the forty samples of .08, big alteration zone, some silicification, underground workings that had gold in them, so you had a three-dimensional model; the mineralization wasn't just on the surface.

Jim Anderson was in charge at that time. And boy, Jim sat there and he listened and he reacted to the idea like a kid with a new toy; man, this is a great idea and we need just to go look at it.

It had gotten us out of Nevada; Cherry Hill is in California. It's not in gold country. Nobody went to the Coast Ranges, where Cherry Hill is, to look for gold. That was mercury country. But you didn't go there to look for gold. You're out of your mind if you did, or didn't know what you were doing. Anyway, Jim reacted to that like a kid with a new toy. The initial response was, how much money do you need to carry on, to continue this? How soon can we get the Cherry Hill property signed up? And how many people do you need to look at all the mercury occurrences in the northern part of the Coast Range in California? And since looking at some of the Lead files was instrumental in this, and certainly locating the Cherry Hill property, Jim said, "Well, you've got to go to Lead

and look at the rest of the files, go through those and see what else might be in there," which I did.

But it really got things stirred up and put a lot of excitement and positive feeling within the exploration group. Because it was a new idea and a new part of the world and the significant project to go along with it. I mean it all happened at once. It wasn't like you got the idea and you work on it for three years and you finally come up with the project and then you reel it out. This was all laid out for them as a package deal. Here we got the idea, and here's the mine, all we've got to do is drill it out and we're successful. And of course Jim had only been around for almost two years, I guess, a year and a half. So, he was pretty excited that, you know, gee, I'm going to be successful less than two years being with the company. This is great.

So, anyway, to make a long story short, we tied up Cherry Hill and did some evaluation of the Cherry Hill property. There were some complicated factors there because of the owner of the hot springs adjacent to the property and long negotiations with him, who had no interest in the property but he was concerned about the noise the drilling would make and concerned about the fact that if we drilled some holes it may dry up his hot springs. It was half a mile away. Bill Casburn can tell you all about negotiating with that individual.

We did an extensive mapping, sampling, finally got to the point of doing some drilling. But while that was happening, I went off with myself, Joe Strapko, and Tom Timken to look at all the other mercury mines in the immediate area, in the Clear Lake-Berryessa area.

Swent: Did you look at New Almaden and New Idria at all?

Gustafson: Looked at New Idria; that's to the south and that was later.

Swent: Those were big mercury mines; did they have hot springs as well?

Gustafson: Not at New Idria. But you're right, they were very big mercury mines. New Almaden is probably the biggest and New Idria was certainly one of the bigger, maybe about the same size.

Swent: But springs association is what you're looking for as well as mercury.

Gustafson: Well, a combination of things, but a lot of the ones up in northern California do not have hot springs occurrences with

them. And 99 percent of them are simply serpentinite with cinnabar along fractures, along structures that have a little bit of mercury associated with it and this is what the old timers were mining. They were fairly small occurrences.

Swent: Again, these were old, these had been mined since 1860.

Gustafson: Right.

Swent: Over a hundred years now that this was a big mercury district.

Gustafson: Yes. Most of the mining there took place at the time when the Mother Lode mines were active. They mined the mercury in the Coast Ranges in northern California and then took it to the Mother Lode to help extract the gold from the rock.

Swent: So, you started to check out all of those then?

Gustafson: Yes, there were eighty or ninety. Again that included going through the literature; there was a good publication U.S. Bureau of Mines put out, Mercury Occurrences in the United States. They discuss the mercury occurrences state by state. Just a matter of reading about them and prioritizing and then deciding, "Well, this one sounds interesting."

Swent: What was the date of that publication, do you know?

Gustafson: I've got it at home. It was about 1951 or--

Swent: Fairly recent then?

Gustafson: Yes, I'd say it was in the fifties. It lists essentially all the mercury occurrences in the United States. It's well done. Good publication. But that was really the bible to prioritize and locate them and go out and look at these mercury occurrences. So, that's what I used as a guide to the northern parts of California to find out where the mercury mines were. And it was a matter of looking up the ownership and contacting the people and getting permission to go look at their property. Again going to the courthouse.

Swent: You left the Cherry Hill project at that point?

Gustafson: Basically, yes. Other people, Ray Wilcox worked on that--

Swent: You presented it at this budget meeting and they decided to go ahead with it?

Gustafson: Right, yes, we signed up the property, made the deal with the Wilbur Hot Springs people. Dr. Miller was his name.

Swent: Then what happened?

Gustafson: Oh, Cherry Hill didn't pan out at all. It was probably one of the most disappointing things in the world because you would have bet, not a month's pay, but you'd bet a lot that it was going to be a gold mine, just looking at the surface. But it didn't go anyplace. It was all on the surface and you'd drill down and immediately get into unaltered rock, unmineralized rock, particularly below some of the best surface mineralization. There's some mineralization at shallow depth. And there is a small resource there. There's maybe 100,000 ounces sitting there, but not enough. It's got metallurgical problems and it's not a simple metallurgy. The ore is very erratic in its distribution. It's not a truly disseminated type occurrence that has good continuity from drill hole to drill hole. Homestake probably drilled fifty, sixty holes in there, something like that. And we did put together an inventory. So, there is a resource there, but very small.

Swent: It was very disappointing.

Gustafson: Very disappointing, very disappointing.

Swent: It must have been especially so to you.

Gustafson: Well, it really was. I thought, "Man, you just can't go wrong with this thing." But in the meantime--let's see, we signed that up in probably the fall of '77, might have been the spring of '78, that all the agreements were taken care of. And then we had to go through the Colusa County commissioners, board of supervisors, to get permission; even though it was private land, still we had to go through the county regulations. That took some time and it was the end of '78 before we could really start doing any drilling on the property. It had been mapped, it had been sampled, everything was taken care of but it was really the end of '78 before we started to drill. So, it was a year later. And in the meantime I was running around looking at all these other mercury occurrences.

And when we started drilling it was right in the rainy season and that was one of the years it really rained and that part of the country, when it rained, it just turns into mud. It was a real disaster. It really generated a lot of problems because of the weather and the time of year that we were doing it.

Anyway, I was out looking at other mercury deposits and the way it would work is I would go out and do the initial examination, take a few samples by myself. And then if I saw one that looked interesting to me, then Joe Strapko and Tom Timken would come in. I would spend maybe two days there. And then, if it looked interesting, Joe and Tom would come in and they would spend two or three weeks. They would do some detailed mapping and sampling of the property. That's how that worked. And in February of '78 is when I first went to the Manhattan mine.

Swent: You had been looking at others in the meantime.

Gustafson: Right. It started with Cherry Hill as the center and worked out from there. And Manhattan is thirteen air miles south of Cherry Hill. But there's the Abbott and the Turkey Run and the other ones that are right in that immediate vicinity.

Swent: Some of them have wonderful names.

Gustafson: Oh, yes, there were, like I said, eighty-eight different mercury mines that I looked at in that part of the world. Just in the Clear Lake-Berryessa area.

Bill Wilder, Owner of the Manhattan Mine

Gustafson: But in February of '78, I ended up at the Manhattan mercury mine which was owned by Bill Wilder who was living on the property in a trailer. He was mining the mercury on a very limited scale. He was running his mercury retort. He also sold decorative rock to garden shops in the Sacramento area. And he also had a contract with Mallory battery company. They would ship him old mercury batteries and he would put them in his furnace, his retort. That's a rotary kiln, which was certainly the only one in California that was operating. McDermott [Nevada] was probably the only other one in the United States that was operating at that time. And he would put the mercury batteries into his rotary kiln, his retort, and heat them up, get the mercury out of them and then send the mercury back to Mallory so they could reuse the mercury.

He was living there on the property. He, his wife Kay, and his men; he had maybe two or three people that were working for him. And I drove in there on February 16, 1978, to look at his mercury mine, which was one of the more interesting ones in the literature. Number one, it was in volcanics and it was

described as having paleo-hot-springs activity, chalcedonic quartz veining. And a fairly significant mercury mine in its day. I think it had started production in 1864, is when it was first mined for mercury and was mined up until the early 1900s, maybe 1904. Then got involved in some litigation and was shut down. And then Wilder had picked it up in the mid-seventies. He hadn't been there too long, maybe '73, '74. He had actually picked up the property and was merrily mining away and not making much money but enjoying what he was doing. I'm sure Bill would have some good stories to tell you about that.

Swent: He enjoys what he does.

Gustafson: Oh, yes. I'm sure he still does. But anyway, I met Bill, a very lovable, happy-go-lucky individual who I really admire and like. Bill's a neat guy. I told him I was interested in evaluating the mercury potential of his property. Of course when you say Homestake Mining Company to anybody, they immediately think of gold and when somebody says, "I work for Homestake Mining Company and I'd just like to evaluate the mercury potential of your property," the guy looks at you like, "Hm. This guy's really not telling me the straight scoop," which I'm sure Bill thought.

But anyway, "Yes, no problem; here, I'll show you around." And Bill loves to talk. So I spent two days there and I probably talked to Bill fifteen hours a day. And he'd take me around and he'd show me this and say, "Well, let's go over here and look at this." Well, he was taking me to more or less the outer fringe areas of the property which is where he was mining the mercury. I really didn't want to look at that. I wanted to look more in the central part where the hot springs activity was and the quartz veining and all this because if there's going to be any gold there, that's where it would be. But I kind of went along with Bill and let him give me the tour. And we seemed to hit it off pretty well together.

I spent a couple of days there and took a bunch of samples, made a quick geologic sketch map of the area. And left and went home and got the samples analyzed and lo and behold they ran a high of a third of an ounce of gold. Maybe half the samples didn't have anything in them. But there were quite a few .03, .07 and there was one that was .34 ounces of gold per ton which was pretty darn significant in a mercury district and it was certainly not just an anomalous occurrence.

So, that's what got us started on the Manhattan mercury mine evaluation and soon as we got those samples back, of course, I took Tom Timken and Joe Strapko and said, "Hey, you

guys go spend two or three weeks at Manhattan and let's map and sample that area," which they did. At the end of like a three-week period, they had over a hundred samples that they had taken. We had those analyzed and there was a central core which later, in the mining days, became what they call the central zone, that averaged greater than .1 ounces of gold per ton on the surface. And there were a lot of scattered occurrences out of that zone. So it was developing into a pretty good-sized surface gold expression.

And then we stopped work because we didn't have the property tied up with Wilder. And there was also another property owner involved, Bob Kauffman, who has since passed away. But he had four unpatented claims in the area, plus some ranch land off to the northeast. We stopped all physical work at that time.

Swent: You said his claims were unpatented.

Gustafson: Unpatented.

Swent: Were Wilder's patented?

Gustafson: Yes. But we stopped all work at that time in April of '78 and started negotiating with Bill Wilder, which initially involved Ken Jones and then Bill Casburn came on board with Homestake about this time. He and Bill Wilder really hit it off on a social, business basis. Bill Casburn was then responsible for negotiating with Bill Wilder.

Swent: And by then Homestake had a land department. Wasn't Bill Casburn their land man?

Gustafson: Yes. Bill was manager of the land department. Exactly. It was December of '78 before a final deal was signed both with Bob Kauffman and with Bill Wilder on the property. So, it took months of negotiation. During this time we did not do any physical work on the property.

Swent: Were you continuing to look at other things, then?

Gustafson: Yes. I was off looking at other ones and waiting for the day we could drill the Manhattan mine.

Swent: You were more sure of this than of Cherry Hill?

Gustafson: Yes, I would say so.

Swent: Your disappointment at Cherry Hill must have colored things a little for you?

Gustafson: Well, it did. I'm trying to think of the timing; it was, yes it would have been, the really negative results from Cherry Hill came in end of '78, first part of '79. After the first couple of holes we were really discouraged and thought, "Well, this isn't going to pan out the way we thought." But the surface expression, because of the alteration, the quartz veining was much more impressive at Manhattan than what it was at Cherry Hill. There were some obvious flaws in the Cherry Hill situation which you can say, "I should have really thought of that differently." But it's a much weaker mineralized system than Manhattan. Manhattan was just a joy to look at on the surface. It has to be one of the best exposed, zoned gold deposits that ever was. It was just a type example, certainly a type example of the mercury-hot-springs-gold association; a classic example. Just all laid out before you; exposures were good.

Swent: And yet nobody had thought of it that way before?

Gustafson: No, and there again it wasn't gold country. You don't look for gold in that part of the world.

Swent: So, that was that. Although there had been a report; was it the Becker report in 1888?

Gustafson: You've got a good memory, yes. Bill Wilder pointed out to me, after maybe the second or third go-around meeting with him, the fact that he had a copy of the Becker report. And it mentioned gold in pyrite at the Manhattan mine. And Bill told me after we got there that because of that report, he had sent a sample into San Francisco for assay two years before. And he indicated it came back .6 ounces of gold per ton.

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Gustafson: Bill did have a sample which was taken from the Gale Pit that he said ran .6 ounces of gold per ton. He took me to the site where he took the sample. I took a sample there, didn't run anything on my first go around. And Bill kind of disregarded it as a fluke, you know, he thought, "Well, gee"--

Swent: But he was looking.

Gustafson: Well, yes, he at least sent this one sample in. That's right and that was really because of the Becker report; we found out

after the fact that they had recognized gold there years before.

Swent: I think the legend that has grown up is that nobody had ever suspected that there was gold there. But that isn't really so.

Gustafson: Well, it's not quite right because of the Becker report. There was an indication. It's a one-line sentence. [laughter] Since then, I've talked to numerous people, old time geologists that have been around in the western U.S. for years. They say, "Oh, I looked at that property back in the fifties, as a mercury prospect, never thought to analyze the rocks for gold." Of course, in the fifties it wouldn't have meant much because the grade wasn't that phenomenal. And it is a complex refractory ore that involves new technology that would have not been possible in the fifties. So, it's a matter of timing and then economics.

Swent: A lot of things have to come together just right.

Gustafson: Right. That's exactly right. They do. And with Manhattan, they all came together just right. The Cherry Hill negative results were discouraging but the Manhattan prospect still looked promising. In fact, we had a meeting there in December of '78.

We had a meeting with Jim Anderson, head of the geological department, and Dick Stoehr was along; I think Paul Henshaw¹ was along. And we went over and looked at Cherry Hill before we drilled Cherry Hill, and of course before we had drilled Manhattan but Dick Stoehr was along and in Dick's true fashion he decided to take a poll after we had looked at Cherry Hill and then we went and looked at Manhattan and he said, "Well, who thinks Cherry Hill is going to be a mine and who thinks Manhattan is going to be a mine?" Well, all the engineers, according to Dick, voted that Cherry Hill was going to be the mine and the geologists voted that Manhattan was going to be the mine. So, there was a little bit of a difference of opinion and we never did find out what Dick Stoehr thought because he didn't vote. [laughter] So, if you talk to Dick you can ask him what his thoughts were. I'm sure at this time he'll say Manhattan, but that was interesting.

¹Helen R. Henshaw, Recollections of Life with Paul Henshaw: Latin America, Homestake Mining Company, an oral history interview conducted in 1987, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1988.

Detailed Mapping and Sampling

Gustafson: After we got Manhattan signed up in December of 1978 we went back, did some more detailed surface mapping and sampling. One thing that we were trying to do is, the rock is very hard there, it's very silicified and we were trying to take chip samples with geologists' picks and chisels and moils and sledgehammers. I had three or four guys that were sampling the surface and it was just taking them forever. I mean, they'd get three or four samples a day. And I said, "At this rate, we're going to be here ten years just sampling the surface," because we liked to take a lot of samples from outcrops to decide where you're going to drill your holes. I said, "Man, this is going to just take forever," so basically, at Dick Stoehr's advice, which it might have been at that meeting that he said, "Why don't you just get an air track drill in here and poke a bunch of holes down."

Swent: Air track?

Gustafson: Air track. It's a drill. You see them a lot on highway projects if they're excavating, if they're making a road cut. You'll occasionally see an air track. It's mounted on a caterpillar track and it's got a bunch of tubes and pipes and a boom that goes out with a little drill bit on the end. And they can drill vertical holes or horizontal holes or whatever.

Dick suggested, "Well, why don't you just get a little air track out here and drill some shallow holes?" And I thought that sounded like a fantastic idea. We were a little sensitive to the environment because we were in California, in Napa County. But there were a lot of roads, the area was just totally devastated, as you know. Lots of roads and buildings around and junk around. So, we decided we would get an air track in and if we just drill on the existing roads, it would be okay and no disturbance. We didn't need a sump or any additives. We'll just drive the air track around on the existing roads, drill as deep as we can and take some samples to give us some indication of what's at depth.

So, we got a fellow out of Petaluma, came up with his air track and in three weeks time he drilled ninety-three holes. Cost us \$10,000, was pretty darn cheap. The deepest hole we could drill was seventy-five feet and some of them we only got down five feet because we'd hit voids in the rock and then you wouldn't get any return of your cutting so you couldn't drill anymore. And the average depth was thirty, thirty-five feet in those holes.

Swent: These were vertical?

Gustafson: They were all vertical.

Swent: Just along the roads?

Gustafson: Just along the roads where you could just drive along the road and we would say, drill here. We drilled ninety-three of these holes. Got the results back from those and they were very, very significant. Number one, it showed there was gold at depth. It showed that it was over a rather large area and so it was another piece of encouragement for the Manhattan project. And then we felt that we were ready to do some deeper drilling.

Approaching the Napa County Planning Commission

Gustafson: Since we were going to drill some holes, which involves more people and increased activity, we felt that we really had to go to Napa County supervisors and talk to them, tell them what we were doing and get their permission. So, Dennis Goldstein and I went to the Napa County Planning Commission, talked with Jim Hickey and took an air photo with us of the area to show the previous disturbance. Took a written description of what we wanted to do and talked with Jim Hickey plus one of the other people in the planning department.

They were kind of bewildered because they had never been approached by a mining company to do exploration for gold. They really didn't have any regulations in place at that time. It was the time when each county was drafting reclamation, environmental assessment plans. Napa County was in the process of doing theirs but hadn't done it.

So, they really didn't know what to do with us. There really wasn't any reason we couldn't do the work but they didn't really have the authority to tell us we could. We said, "Well, we just want to go in and drill a few holes and there's so much disturbance already. We'll try to keep our work on the existing roads and we're really not going to harm the area any." It's so remote. It's up there in the extreme northern part of Napa County. I mean, nobody was up there, that sort of thing.

So, they finally agreed that we could drill something in the neighborhood of twenty-five holes as long as we kept them

more or less on the existing roads and didn't have a lot of new disturbance.

Swent: You weren't opening up the mercury mine at all, working in underground areas where there had been mercury mining?

Gustafson: We had already opened up one of the adits at that time and sampled it, well, about the time we were talking with them but that was really just a little cleanup. It wasn't a difficult task at all to do that.

Swent: You were more interested in the surface?

Gustafson: Right. And there was really only the one adit that was easily accessible that we got into, right near what became the central zone. That was what it amounted to. We did some underground work later. But that was on down the road.

Anyway, they agreed that they would let us drill our holes and we didn't have to have any formal permitting or anything like that. I would drill around twenty-five holes and I said, "You know, chances are on these exploration projects, we wouldn't even drill twenty-five holes. We'll walk away and never come back and bother you again," which is what usually happens. So, we went up and started our drilling and drilled the first hole. The first hole was a reverse circulation hole drilled in June of '79. It was a very, very significant hole. And then we decided that maybe we would be better off to core drill the deposit to get better geologic information, more reliable samples, rather than using the reverse circulation method.

So, in September of '79, we drilled the first core hole. And that's the one that was plus or minus 400 feet of .19 ounces of gold per ton. We stepped off 200 feet and drilled the second hole and it was around 375 feet of .24 ounces of gold per ton, which are both very exciting, significant gold grades over significant distances. So, then we were off and running and didn't stop drilling until really the middle of '82 when the project was transferred over to operations.

Swent: You were outlining the ore body? Is that what you were trying to do?

Gustafson: Defining the extent of the mineralization, getting assay information so we could calculate both the tonnage and the grade, define the inventory and eventually the ore reserve for the deposit. Ended up drilling 406 holes, altogether.

Swent: And were those sent to Salt Lake City for assay also?

Gustafson: No, prior to getting involved in Manhattan we started using a lab in Reno, Hunter Assay Lab, and they did essentially all the assaying for the project. We would ship the samples from Manhattan, which became McLaughlin, to Reno.

Swent: How do you ship them?

Gustafson: We used pickups. We just drove back and forth. About the only thing you could do from there.

Swent: That's quite a distance.

Gustafson: True, you could take them to Sacramento, to Lower Lake or Clear Lake, and ship them out of there. But by the time you do that you might as well keep right on going and transport them to Reno. So, they were all driven to Reno. But we would saw the core in half on the property and then transport it to Reno.

Swent: It must have been an exciting time.

Gustafson: It was.

Swent: You pretty well knew from the beginning that this was a good one, then.

Gustafson: Well, you knew it was a good one. The first two holes were good. Holes three, four, and five were not that spectacular. Six was a good hole as I recall. And then, oh, maybe seven, eight, nine were more interesting holes. But you knew you had something, but it all kind of evolved a step at a time and we were so involved in the activity, I guess we didn't really think that gee, we're drilling out something major here. It just kind of evolved on a day-to-day basis.

There were sort of disappointments along the way. You would drill a hole that's not very good. But then you'd drill another one and it would be a good hole and information was coming in so quickly and you were putting them all together but you're not quite sure when it all made sense that you had a significant ore body. Initially you thought maybe you're drilling down a vein or a narrow zone that didn't generate enough tons. That's your initial thought even though the grade was significant. By March of 1980 we had developed 6 million tons of around .17 ounces of gold per ton which was significant but it really wasn't as big as Homestake would have liked to have. But it was sort of a nice gold deposit at 6 million tons.

March, 1980, Decision to Go Ahead: Informing the Public

Gustafson: We had a meeting in Napa in March of 1980. We were trying to decide, Don Delicate was there and he was a kind of advisor or critic. He was there, engineers, metallurgists, legal, geologists, kind of a full-blown meeting in March to decide what the next step was for the deposit. Do you just concentrate on the 6 million tons and define that in more detail or do you step out and see if you can find more? We ended up with a combination program because you needed to do both. I think that was one of the stepping points for the project, that March 1980 meeting that we had in Napa. Then we did step out to the north and look for additional ore.

If I might back up at this point in time, we kept going back to the county, to the planning commission and said, "Well, yes, I guess we're going to drill a few more holes. We've surpassed our twenty-five," we were probably up to forty by then. "I guess we're going to continue. We're still going to be around and what do we need to do?"

And they still didn't know how to react to us or what to do, so they said, "Well, okay, go ahead. Keep us informed." So, we just kept working and really never got any formal written permission. It was all done on a verbal basis with a handshake. If you did it in today's world, which it hasn't been that long ago, you would have a bigger problem of getting permission to drill and abiding by the environmental regulations. But, we actually drilled the deposit out and never got one permit to do it, which you couldn't do today. It would probably take you a year to get the permit to drill the first hole, if you could even get it today.

But we kept the county informed. We would go talk to them and say, "Well, this is what we're doing. If you want to come up and look at it, that's fine, come up and look at it," which they never did. But there again, it was a remote part of Napa County. Most of the people in Napa didn't even know that was a part of Napa County.

We talked to the Lake County and Yolo County people and told them early on what was happening. Didn't keep anybody in the dark. Had the first meeting with the people at Lake Berryessa on the project, again just to inform them. It was a local town meeting and I went to give a presentation to inform them, we're working up there. We may have a gold mine and it's kind of in your back yard. If you have any questions come see us.

Swent: Was this a meeting called especially for that purpose?

Gustafson: Basically, it was.

Swent: Who suggested it?

Gustafson: Well, we had Hill and Knowlton on as the public relations advisor and they kind of set up those meetings.

Swent: Had they been hired just for this?

Gustafson: Basically. Well, they did other work for Homestake but they were involved early on with McLaughlin. I'm trying to think when that meeting was. We announced to the world the discovery in August of 1980. I guess that meeting would have been December of 1980. That would have been the first presentation to interested parties.

Swent: Did Hill and Knowlton assist you with that?

Gustafson: They basically set up the meeting, made arrangements for it.

Swent: Did they help you with your speech, with your presentation?

Gustafson: They came up with handouts, put together a packet for handouts, information on Homestake, a little information on the project.

Swent: Did they coach you on your presentation at all?

Gustafson: Oh, not really. I basically went through telling them who Homestake Mining Company is and what we were doing on the project, how we visualized it unfolding, somewhat of the timing involved, comparing it with other gold mining operations, size-wise and employment effect on the community, this sort of thing. And that you do have environmental regulations that you have to abide by.

We talked to the Berryessa people specifically because Berryessa is downstream from the project and as soon as you talk about an operation upstream, people get excited. And then it basically turned into a question and answer session. It was a thirty-minute presentation that I would give and then just open it up to answering questions.

Swent: Were you the only one there from Homestake?

Gustafson: Dave Crouch was there. Dave was there at that first meeting. I don't think Dennis Goldstein was there.

Swent: You were the main presenter, though?

Gustafson: Yes, I was the one that gave the presentation.

Swent: Was there much opposition? What was the feeling?

Gustafson: Didn't really detect any opposition. They were concerned about water quality, to a certain extent air quality, but because of Berryessa they were concerned about the water quality which is understandable. I explained to them in today's world you basically have to design a closed system to the best of your abilities and that there are state, federal regulations that dictate how you build things and that being a major mining company, you're certainly going to do things better than the law requires, is what it amounts to.

Swent: You didn't know at that point what sort of treatment there would be of course, did you?

Gustafson: No. You knew that there would be cyanide involved at some stage in the operation.

Swent: Did you mention that?

Gustafson: Oh, yes.

Swent: You did. That's the word that scares everybody, of course.

Gustafson: Well, that's right. And if you don't mention it, somebody in the audience is going to know that that's what's involved in a gold mine. So, yes, that was all pointed out, too. Then I went around, oh, in a twelve-month period, I probably did twenty different talks to Rotary Clubs. Made one to the Northern California Women Bankers Association in Clear Lake at one time. But there were just a lot of presentations. Went to St. Helena and gave one to the city board in St. Helena. We just kind of hit the surrounding towns.

Swent: Was this at their invitation or did you try to drum up these engagements?

Gustafson: It was a combination. You would get requests for them at times and others we would actually go out and be forward and say would the Rotary Club of Napa like to have a presentation. And people were interested in attending them and hearing what we had to say.

Swent: You were going to all three counties at that time? Mostly Napa, probably?

Gustafson: Well, mostly Napa, but we went to the grange hall in Capay Valley and I gave a presentation there one night. And again they were an interested party because the drainage from McLaughlin goes into Capay Valley along Davis Creek. That goes into Capay Valley. In fact, they were one of the groups that later became a problem in resisting.

Swent: They were the most avid opponents, weren't they?

Gustafson: They were, that Capay Valley group, because of water quality. As it turned out, which really surprised me, Yolo County was more adamant than really either Napa or Lake. And they were the most removed, which really surprised me but that's the way it turned out. I don't know why they--well, they were just different, a different breed of people over there, I guess. They're more concerned about their livelihood. They raise a lot of almonds there in Capay Valley. So, they were concerned about that. And we gave tours for the county supervisors from different counties.

Swent: You mentioned Jim Hickey. Who was he?

Gustafson: Well, Jim Hickey was the planning supervisor, head of the planning department. And then there was the Napa County lawyer, who was quite helpful. His name was Hackett. And the one supervisor who was really helpful was Harold Moskowite. Yes, Harold and I--

Swent: He was a rancher, wasn't he?

Gustafson: You know where Moskowite Corner is?

Swent: I have seen the signs--

Gustafson: Yes, you've been by the signs. He lives within a mile of there which is at the south end of Berryessa, past Berryessa on the south side, the south end. But Harold was very helpful.

##

Gustafson: And I had some discussions with him, keeping him informed as to what we were doing. The worst thing people don't like is the element of surprise. As long as you keep people informed they seem to go along with what you want to do. But if you don't tell them and they're surprised, they read about it in the newspaper or something like that, then they get all up in arms and think well, I'm not part of that project. We wanted to keep everybody informed.

Swent: Did you deal with the Sierra Club or the environmental groups at all?

Gustafson: I didn't personally. Dave Crouch was involved in that and Ray was involved--

Swent: Ray Krauss?

Gustafson: Yes. Ray Krauss was involved in that. I never got involved with the Sierra Club.

Swent: Ray was hired later; he followed you on the scene didn't he?

Gustafson: Right, and then he became environmental manager for the project.

Swent: He was brought in for this Manhattan project.

Gustafson: Exactly. Yes. In fact he continued my efforts with presentations and keeping people informed and did an excellent job doing it. He really picked up the ball and ran with it. He would have been involved with the Sierra Club and the Friends of the Earth?

Swent: Friends of the Earth, there was also Friends of Cache Creek that came up. I think it was an active group.

Gustafson: And there was an Audubon Society that Dave Crouch got involved with.

Swent: But you were mostly meeting with community groups and government groups at that point.

Gustafson: Right. Government agencies and service groups, community organizations. Rotary Clubs and the planning commission people and the city boards. Those groups are the ones I mainly met with. I even gave one in Vallejo, gave a presentation to the Rotary Club in Vallejo which seems kind of far removed.

Swent: It was general public information.

Gustafson: Yes, that's right. Well, something happened in the state, in their vicinity, even though it's quite a ways from Vallejo but again people were interested in what was going on.

Swent: Were you continuing at the same time to try to find another project, another gold mine?

Gustafson: Well, I wasn't, not really at that point. Homestake reorganized the exploration group in the fall of '79 and prior to that I worked for Ken Jones. Ken was manager of the Reno office. Then during most of '79, up until the fall, I was still out, you know we had Cherry Hill and we had Manhattan, I was still out trying to generate that third property. We looked at the Stayton property down by Hollister, California, which was another one that does have detectable gold on the surface, generated that. We got involved in Idaho, Idaho Almaden, it's an old mercury mine that has some gold on the surface. Also one in Oregon just across the border from Idaho. Anyway, there was one up there that had some gold and so, yes, I was still out during most of '79 trying to generate another.

Target Evaluation and Deposit Development

Gustafson: Then in the fall of '79, I became manager of target evaluation for Homestake and reported directly to Jim Anderson. Then I got more totally involved in the day-to-day activities at McLaughlin, the drilling and putting everything together and managing the project fully at that time. And that went on until, I guess it was until the fall of '80. Then I became manager of deposit development because McLaughlin advanced from what we call the target evaluation stage into the deposit development stage after the announcement in August of 1980. So, I became the manager of deposit development at that point and again reported directly to Jim Anderson.

Swent: And Jim was vice president--

Gustafson: Vice president of exploration.

Swent: So, it was still considered an exploration project.

Gustafson: Right, oh yes.

Swent: And Marilyn and family were still in Reno but you were in a motel in Napa? Or in a trailer up at Manhattan?

Gustafson: Well, it was a combination. We actually had rented a condominium at Silverado that we used on occasion. I spent a lot of time, of course, in Lower Lake-Clear Lake area in motels. But then, actually spent an awful lot of time in San Francisco. I probably spent as much time in San Francisco as I did on the project site, which, yes, just keeping Jim informed and dealing with either the legal department, budgets,

environmental issues, or engineering studies. The situation at McLaughlin became less and less of a geologic endeavor and more and more of a business undertaking which certainly increased my experience and background. But I probably spent more time in San Francisco than on the project site.

Swent: Were you evaluating data that other people were sending in from the site?

Gustafson: Well, they got most of that in Reno. The people that were actually working on the site were sending the data to Reno, then I put that together and then we would have it taken to San Francisco or send it to Jim.

Swent: Were you telling them where to drill?

Gustafson: Well, it became a grid drilling program after a while so that, no, you really weren't telling them where to drill, it was just, "Let's get the thing moving." We had five to seven drill rigs on the site at times. Everything was going very quickly.

Swent: Did you select the drillers?

Gustafson: Tom Kalk did most of that. When you select the drilling company it's on a bid basis. We looked at three different companies; we actually had two companies there at one time drilling. But, number one, it's who's got the lowest price and who's got the best equipment and can do a quality job. Plus it's who's available. At that time, gold exploration was increasing in the western part of the States. Drill rigs were hard to come by.

Swent: There was a real shortage of them for a while, wasn't there?

Gustafson: Yes, right. Of course, they love a long-term contract like McLaughlin where they can put four or five rigs on one site for a year. That's what they're hoping for rather than the one- and two-hole jobs where they're just moving around all the time. That was basically handled by Tom Kalk.

Swent: I'm just trying to get a sense of what you were doing in San Francisco.

Gustafson: Keeping Jim informed was a lot of it. Jim is a stickler for wanting to know what is going on.

Swent: Day-to-day drilling results, for example?

Gustafson: Well, you know at that point in time I was involved with the engineering aspects of it, the environmental aspects of it, the legal aspects of it, so the geology and the data, that just kind of ran itself. That was the simple part. Yes, because it was such a beautiful ore body, things were coming in so positive that it became a grid drilling program. We were just collecting data and putting it together.

As I mentioned before, we had the 6 million tons initially and then we stepped off to the north and immediately drilled some very significant mineralization. It potentially doubled the size of the ore body overnight.

There's an interesting story that goes along with that that took place in the fall of 1980. I went before Homestake's board to request, it was after we had made the announcement and I went before the board to request \$8.3 million to continue with the deposit development activities. We basically had the 6 million tons, which was good. That was a respectable ore body. The night before the board meeting, I had my maps all ready to present, everything drafted up and ready for the board. And the night before that we got the assay results back from one of those northern holes. So, I hurriedly, the next morning, just before the board presentation, put a new red dot on the map, because we had all the red dots where we had drilled ore holes and had results for the 6 million tons and then put this red dot up to the north and went before Homestake's board and said, "Well, we've got this 6 million tons here, but we're just opening up a totally new zone to the north and we've practically doubled the inventory since this map was made." And, of course that made it a lot easier to get the \$8.3 million that I was requesting from the board. But those were exciting times. Very exciting times. Things like that really make your day.

But back to what I was doing, we had environmental baseline studies going on, engineering studies, metallurgical studies, and I was really trying to coordinate all of the activity. We had a monthly meeting of all the disciplines involved.

Swent: Did you have people in house to do these things, or were you contracting them out?

Gustafson: Well, Bob Previdi was the engineering leader. He was in the San Francisco office for a while. Then he went to Denver. But Bob was the engineering individual. Richard Kunter was the metallurgist. Dave Crouch, of course, was environmental. And Dennis Goldstein was legal. And then Tom Kalk was the project

geologist. Bill Casburn was land. And then we always had three or four consultants. We used environmental consultants all the time. There was usually a metallurgical consultant involved helping Richard Kunter with his work. We had a monthly meeting. We discussed budgets, we discussed activities, problems, fatal flaws. A one-day meeting once a month, so it took time. In fact, Langan [Swent] attended one of the meetings in Reno.¹ I remember him sitting there. The public relations people were there because that was an ongoing program. Just coordinating people more than anything. It's amazing how fast time goes when you're having fun.

Swent: Did you enjoy that?

Gustafson: I enjoyed it. I did enjoy it. There were times when I really wondered why I was enjoying it, but I enjoyed it because it was a success. I would like to do it again. I would do it again. But it was an extremely hectic time, mainly because you were working basically seven days a week, burning the candle at both ends just to keep everything going and just to know what was happening. It involved a lot of time and as you know, Jim was a rather demanding supervisor, which was all right. But Jim liked to be informed. So you spent a lot of time on the phone with Jim.

And even during this period from '80 to mid-'82, I also got involved with some uranium joint venture activities that took time. And there were always other things that came up to keep a person busy.

Swent: I didn't realize they were still doing uranium at that time.

Gustafson: They really weren't but it was the deal up in Wyoming with the Westinghouse people. It was a joint venture but Westinghouse was putting up all the money. Of course nothing was really happening but it was more of a thorn in your side than anything. So, I got involved in that to a certain extent during that period. There's always something else.

Transfer to Operations, June, 1982

Swent: At what point does this turn from project development into project operation?

Gustafson: June of 1982.

¹See Langan Swent, Working for Safety and Health in Underground Mines; San Luis and Homestake Mining Companies, 1946-1988 [2 volumes], Regional Oral History Office, The Bancroft Library, UC Berkeley, 1995.

Swent: What's the deciding factor in this? That's when it happened, but how do you know when it's ready to happen?

Gustafson: That's a good question. Jack Thompson came on in '81 with the sole purpose that he would take over McLaughlin when it was transferred to operations. And he was on for essentially a year, learning what had been done and he basically ran the project on a day-to-day basis.

Swent: Did you have to get him informed, too?

Gustafson: Oh, yes. Well, he was indirectly working for me but not really. It was a good relationship; he reported to Humphrey but I was still basically in charge of the project but Jack was getting more and more involved in the day-to-day activity, which was good. It kind of eased him in, and then when it was ready for the transfer he was fully up to speed. So there wasn't any lag time. He was basically doing it anyway when it formally got transferred to operations, which was June of 1982. So, there was a period of dual leadership, if you want to call it that, on the project. And Jack got involved in the presentations, relieved me of that responsibility.

The transfer was really when a conceptual feasibility study was completed, which was not a full-blown feasibility but it was justification to continue with the project and request more funds and go out for bid on detailed engineering design.

Swent: They had done all of this, but up to this point there still hadn't been anything you called a feasibility study?

Gustafson: We had done economics from day one but it wasn't a full-blown feasibility study. There were still a lot of unanswered questions, one being the metallurgy. Would the process work? If it did work, what was it going to cost? What would the recoveries be? And so there were still a lot of questions, a lot of cost questions to be answered at that point.

Swent: You were researching technology at the same time.

Gustafson: Yes. Through Richard Kunter's efforts and then Bob Lear; at some point in time, Bob was involved although Richard was the one that really came up with the idea and the process and suggested autoclaving. You've got to hand it to Richard, he came up with that very early on and pushed on that.

Swent: Did you work on the feasibility study, too?

Gustafson: The conceptual one, with Jack, I did. But it was basically his document because it was more of an engineering, economic analysis. There's a short section on geology in the conceptual feasibility study but we got into reclamation, environmental concerns. It was a good document. It basically, with input from a lot of people, but it was basically Jack's document.

Swent: Was it your sense that there was still a possibility that that study would be rejected, that the whole project would be stopped?

Gustafson: Oh, no. No, not at that point. No, it was a go no matter what. But you couldn't call it a final feasibility because you didn't have detailed engineering design. You didn't have really the details on what your costs were going to be. But the operating costs were what we thought, were relatively close. And I think the capital costs should have been closer than what they were but that's neither here nor there.

Geologic Forecasts Proved to Be On Target

Swent: Did the geology turn out to be pretty much on target?

Gustafson: Very much so, yes.

Swent: It was about the same size as you said it was.

Gustafson: Well, yes, it's extremely close as far as the grade, the tons, the ore reserve. You can argue about the details of that, which I got involved in in '86. They started mining in '85 and they had gone through a year and a half of mining and they had one area that was half an ounce rock and the computer had projected that there were x tons within this area and when they mined through that in the spring of '86, the grade was there but the tons weren't. Harry [Conger] got all upset at that point and was very concerned about the ore reserve. In fact, there was an announcement in the paper, about this concern--you probably read that.

Swent: Harry Conger was president at that time?

Gustafson: He was chairman of the board and CEO [chief executive officer] at that time. They called me in and Ted Rizzi and another fellow from Denver, Dave Rhodes, that you probably don't know. It was my responsibility to determine if a problem existed.

I spent six months working on that with those two people and there was no problem. The numbers were very close. We went through what had been mined and what we had predicted, what the ounces would be, the contained ounces, the recovered ounces would be. And it came out very, very close. There was this one area that, if you looked at it in detail, you didn't mine what you thought you were going to, but if you look at the global picture, it all comes together and you come out with what you should. And I don't know why Harry got so concerned--in fact, now it's my understanding they've mined better grade than what was predicted. So, now it's gone the other way. But I haven't seen any announcement on that. [laughter] And nobody has called me up to tell me that.

Swent: Well, when you visit the mine now there's a big demarcation in the middle of the pit where it's on the border between two plates or two--

Gustafson: Well, that's the two mineralized zones. There was the central zone which they mined first. Then, there was a line of holes that were poorly mineralized, and then the zone was offset and then continued to the north. That's what you were looking at. The ridge in the pit marks the separation of the two mineralized zones.

Swent: It's a completely different color. It's very visible, now that the mine is opened up.

Gustafson: Have you been up there recently?

Swent: Yes. Not too long ago. It was May when I was up there.

Gustafson: I haven't been up there in probably two years.

Swent: There's a very dramatic change between the north and the south ends of the pit.

Gustafson: Probably more so than when I was there. They had just started mining the northern zone when I was there last.

Swent: Of course, it's pretty clear once you open up the earth. A lot harder to tell before.

Gustafson: Yes, just from a number of drill holes. That's right.

Swent: But you were proved right; I'm glad of that.

Gustafson: Well, yes, it all came out right in the end. Of course, the big questions are the economics and the price of gold, which we

have no control over, certainly not the price of gold. And unfortunately, McLaughlin has been mined at a time of relatively low gold prices. Therefore it was, which a lot of miners do, it was high-graded. They took the high-grade core out of it which you always hate to see. We never anticipated doing that. It was going to be mined as a rather even sixteen-hundredths ore body but they've mined a lot of months plus quarter-ounce rock.

Swent: By high-grading, you don't mean stealing. You mean that they mine selectively to mine the highest grade ore.

Gustafson: Yes, selectively mining the higher grade ore because of the price of gold. You can't fault them for doing that because you do like to show a profit at the end of the year.

Swent: But that's a heavy decision, a very important one.

Gustafson: Yes, because it will shorten the life of the ore body over what was predicted. But the price of gold dictates all that.

##

Swent: Did this finish your involvement with McLaughlin?

Gustafson: Yes. After June of '82 I was really out of the picture.

Swent: It was turned over to Jack Thompson to operate.

Gustafson: Well, for the construction, there were numerous people involved in that. And then, I had that involvement in '86 when I spent six months on the ore reserve clarification.

Swent: Where did you do that? From Reno still?

Gustafson: Yes, but I was up at the mine basically five of that six months, every week for that period of time.

Swent: Studying maps? Drill cores? Samples?

Gustafson: Assays and, yes, maps and the computer plans. We went through everything in meticulous detail; we went back to our original cross-sectional ore reserve and predicted within the area that had been mined, up until July of '86, the operators knew how much had been mined, they knew how many ounces they had produced, then we went back to our cross-sections and said, "Okay, if we had taken just this part out, like they had mined it out, what would our ore reserve have predicted that they would have mined? What grade, what tons, how many ounces?" It

came out surprisingly close at the end of a year and a half of mining. So, I say if you look at the big picture of a year and a half of mining, it's a lot different than a week's mining. Any one week it's not going to be what you think it is. But, if you look at the global picture, it's going to come out the way it should. That was my last involvement with McLaughlin and that was just that six-month period in '86.

Swent: Then you went out to find another one?

Gustafson: Well, I guess so. After June of '82, I kind of got shuffled around. I was still basically manager of deposit development, but there wasn't any deposit development activity going on so I managed the drilling projects for Homestake.

Homestake's philosophy was to have teams of people out generating projects and doing the reconnaissance, the initial surface work and then when a project was ready for drilling we brought in a team of geologists that were competent and interested in drilling aspects of a project. I managed those teams and we had four or five groups of people. So that one group would generate a prospect, then my group would come in and drill it out while the other people went off to generate the next one. Basically you had no control over what you drilled. Someone would bring something in and say, "Well, we want this drilled," and so you'd go out and drill it. It was teamwork.

Swent: This was all in the States?

Gustafson: Yes. Mostly Nevada, where we were working at that time. I did that from June of '82 until the middle of '83 and then got involved in what was called the world-class exploration program.

A World-Class Exploration Program Halted

Swent: Brave words.

Gustafson: Isn't that a nice word? I was manager of world-class exploration. Four geologists were in the group: Bob Woodfill, Tom Kalk, Steve Rose, and Steve Ormore. Our assignment was to look at different commodities. By a world-class deposit, we mean one that is big and high in grade and a company-maker. We were to study the world-class deposits around the world, but basically from the literature review and decide where, based on

modeling and structural features of these deposits, where we might go within the U.S. to find a world-class deposit whether it be rare earths or multi-commodity or it could be gold. Could be anything as long as it was world-class and a money-maker.

We worked on that for a year and a half and it never did make any sense because it didn't fit Homestake's style. I don't think anybody was really committed to it. I'm not sure why we were doing it. But we did until a budget meeting in Reno, early 1985.

We had a budget meeting and my guys stood up there and they presented their ideas. We'd only worked on this for a year and a half. This is a major thing, if you're going to do something like this, it's got to be a three-year, five-year program.

Anyway, the guys got up and they gave their ideas and we had the U.S. segmented into three different parts. They gave their presentations and the money that we would need. At the end of the meeting, Jim Anderson came in and said, "Well, we're not going to do world-class any more." It's all over. So that was kind of a--well, you do what you're told. From middle of '83 until first of '85, that's one and a half years.

We had done some good work, we had put some interesting things together in the first year and a half and were just getting to the point where you might be able to start showing some progress and it was nipped in the bud. So, that was kind of upsetting.

Then I spent first part of '85 until the middle of '85 working on joint ventures. Homestake had some properties that they were interested in farming out, or joint venturing out to other companies. They were too small for Homestake, not of interest. And so we were trying to farm them out to people. Did that first half of '85. Then, middle of '85, that's when I got involved in the international activities.

Swent: Unfortunately, since this interview is supposed to be dealing with just the McLaughlin Mine, we can't go into your other activities. But let's just at least mention China. Did you spend much time there?

Gustafson: Actually, I did. I went to China first time in fall of '85 on a people-to-people tour which was a technical exchange between scientists from different parts of the world and the Chinese people. This was a mining exchange. There were engineers,

geologists, financial people, interested individuals on this trip. Actually spent a month in China traveling from Beijing south on the train looking at various mines, mills, and smelters. We looked at copper mines, we looked at gold mines, we looked at lead-zinc-silver mines. And at each place there was a technical exchange. It was pretty much a one-way street. We would give our presentations but the Chinese never really gave us much back.

Then I went back in '86 and spent a couple of weeks looking at some prospects in the southern province of Guangdong province; through some contacts in San Francisco these people were interested in having Homestake look at them. So, looked at some projects and found one that was, I thought, very interesting. But as it turned out, the central government wouldn't allow foreign companies to come in and joint venture on gold projects. That kind of killed that.

And then I went back again in '87, again trying to just renew relationships and keep things alive in case they do ever change. But Homestake was never really committed to that program either. So, that kind of died on the vine.

Swent: Where else were you involved with the international exploration? Latin America?

Gustafson: I worked in Costa Rica, Honduras, Dominican Republic, Guyana, and Ecuador. That was my Latin American experience and then worked in Indonesia in the South Pacific. Spent probably more time there than any place. Actually generated a project in '89 that we drilled for gold in Indonesia. Did a little bit in Papua New Guinea and Fiji and Malaysia. Spent a couple of weeks in Japan. It was pretty much all around.

Swent: Africa?

Gustafson: No, not with Homestake. No. Mostly Asia and the South Pacific with Homestake.

Swent: That's where the excitement was then, wasn't it?

Gustafson: Yes. Well, I think that's where it's going to be in the future.

Swent: And now you're off to China again?

Gustafson: Yes. Probably sometime in October, maybe November but we'll see how things go.

Swent: I'm glad I caught you while you're here. Thank you very much for sparing the time for this interview.

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Bonny Jean Hanchett

OWNER AND EDITOR, CLEAR LAKE OBSERVER, 1955-1986

An Interview Conducted by
Eleanor Swent
in 1997

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Bonny Hanchett, 1997.

INTERVIEW WITH BONNY JEAN HANCHETT, OWNER AND EDITOR, CLEAR LAKE
OBSERVER, 1955-1986

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INTERVIEW HISTORY--Bonny Jean Hanchett

Bonny Jean "B.J." Hanchett and her husband, owners and editors of the Clear Lake Observer from 1955 to 1986, witnessed the changes in the community brought about by the development of the McLaughlin Mine. At the time of the interview, she had been widowed and was owner and editor of the Cloverdale Reveille. She was invited to participate in the project on 2 February 1997 and I interviewed her at her home in Cloverdale the afternoon of 26 March 1997.

That morning I interviewed her daughter, Roberta Lyons, who lives in the home where she grew up on Jago Bay on Clear Lake. Then I drove over the Hopland Grade between Kelseyville and Cloverdale on a well-paved two-lane road, a beautiful drive through woodlands and vineyards on a spring day with redbud in full bloom.

Before meeting the mother, I already had a sense of a strong family actively participating in the community. Bonny, born in 1920, is tall, slender, and well dressed in classic style. I met her at the Reveille office, was introduced to her son who was working at a computer, and then we drove to her home. She lives in a residential area of "mobile" homes, landscaped so they look permanent. In her living room is a beautiful painting, "Redwood Cathedral," about eight feet high and illuminated, which was given to her by the painter as thanks for an article she wrote. We sat at her dining room table as she talked about her role as community leader. She and her husband were journalism graduates who worked together for decades on small-town newspapers where they did job printing and covered all the local political scene.

She is a practicing Christian Scientist with a firm sense of principle; as a woman who worked all her life and raised five children, she is not naive. She tells of facing down Joe Mazzolo, head of the plumbers union, when he tried to take over the Clear Lake Water Quality Council of which she was co-chair. "He stormed and strutted around, ...but I just didn't have any fear of him." The newspaper took an editorial stand on several environmental and political issues [the two were often synonymous]: the Clear Lake gnat, the Scotts Creek Dam, the Yuba College branch. She credits the McLaughlin mine itself with "a very positive impact," and William Wilder, former owner of the mine, as "another major impact" because of his role as benefactor of the Clearlake community. This interview shows an independent small-town newspaper functioning well as a democratic institution. Researchers may want to refer to the Roberta Lyons interview in this same series for a daughter's view of the same period.

The tapes of the interview were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Bonny Hanchett for review in May 1997. She reviewed it thoroughly with a good proofreader's eye and returned it promptly with some changes for clarification and a few explanatory inserts. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The Bonny Jean Hanchett interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1997, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent, Project Director, Research
Interviewer/Editor
Regional Oral History Office

The Bancroft Library
Berkeley, California
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Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name BARRY J. HANCHETT
Date of birth July 26, 1930 Birthplace MUSKEGON, MICH.
Father's full name VALENTINE MOTT HOWLAND
Occupation ACTOR/RESRATOR Birthplace PATRINA, MICH
Mother's full name DOROTHY LOUISE MITCHELL
Occupation PITNESS Birthplace CHICAGO, ILL
Your spouse KASS ALLEN HANCHETT
Occupation JEWELER/PLASTERER Birthplace Sydney, Mont.
Your children KEL HEULAND HANCHETT; MARY ELIZABETH HANCHETT; KELAND
RIBER-LEE LYNN; JON ALLEN HANCHETT, KATHRYN MCKEE
Where did you grow up? EVERETT, WASH
Present community CLEVERDALE, CA
Education PP ENGLISH / SUPERIOR HIGH SCHOOL, STATELINE '42
Occupation(s) NEWSPAPER REPORTER, EDITOR, CO-PUBLISHER
Areas of expertise JOURNALISM - Reporting, Editorial Writing
BUSINESS MANAGEMENT
Other interests or activities AIL COLLECTIONS, EMERGENCY
FIRE
Organizations in which you are active CLEVERDALE HISTORICAL SOCIETY
CLEVERDALE ROTARY CLUB; KARATE STUDY CLUB - KEE COUNTY

INTERVIEW WITH BONNY JEAN HANCHETT

BONNY JEAN HANCHETT, OWNER AND EDITOR, CLEAR LAKE OBSERVER, 1955-1986

Growing up in Everett, Washington

[Date of Interview: March 26, 1997] #1

Swent: You tell me you were named Bonny because your nurse was Scottish and thought you were a bonny lass.

Hanchett: Yes, that's correct.

Swent: "A beautiful baby." Where were you born, Bonny?

Hanchett: In Muskegon, Michigan. I've never been back there. My folks moved, just when I'm not sure. They were in the show business, and they were in stock companies and on the legitimate stage, they called it. So I don't recall much of my really early years, where I was or where they were. Unfortunately, I never did really find out from them about those early years.

Swent: What was their name?

Hanchett: My mother's name was Dorothy Mitchell, and my dad's name was Valentine Mott Howland. The story went that he was named after Lincoln's physician, but that may be a myth. No idea. But his dad was named that. And his dad was in the Civil War, so they were familiar with Lincoln, so it could be true. I don't know. I usually stayed with my dad's oldest sister, my Aunt Nell, in Everett, Washington, so that's really where my early recollections come from. Actually, that was my home. I went to school there, and then I went to college at Pullman, at Washington State University, because my uncle had gone there. He was a mining engineer. He was head of the copper smelter in Anaconda. For years, yes.

^{1##} This symbol indicates that a tape or a tape segment has begun or ended. A guide to the tapes follows the transcripts.

Swent: And what was his name?

Hanchett: His name was Willard Mitchell.

Swent: And he was at Anaconda.

Hanchett: Just a coincidence that he was a mining engineer. So then I met my husband there, Ross Hanchett, and we both took degrees in English journalism. Then, of course, he had to go to war for three years, and then at that time my oldest son, Val, was born.

Fellow Journalist and Husband Ross Hanchett

Swent: Another Val.

Hanchett: Yes. And then, when Ross came back, we--

Swent: Where was he?

Hanchett: He went into the Pacific theater, was there a year, and was in the Air Force, sergeant, radio operator in the Air Force. He flew thirty-six missions, and when he came back--you know, in those days, you hadn't a clue about what those people went through or that they needed any counseling or any help whatsoever. And I was quite young and had this little baby.

Swent: You had both graduated from college.

Hanchett: Oh, yes, we had our degrees, because he was deferred long enough to get his degree, and then he went into the Air Force. So my poor husband; he came back, and I just thought, well, here we are. Let's get on with our life. And never had a clue of the traumas that he had endured. In foxholes and those long missions and being fired at, and the missions were very dangerous.

Swent: Maybe that was good therapy, too, just to have him pick up his old life.

Hanchett: Yes, it might have been.

But I think back now, and I think, oh dear, all the fuss they make now about these veterans. But he just went on, took on his responsibilities. I was quite proud of him, in fact. So we stayed in Everett. He came back; I was in Everett with my folks, and we went to work on a small weekly paper in Snohomish.

Swent: You both were working at the same paper?

Hanchett: Yes, I was a reporter. He had grown up on a weekly newspaper, worked for the local editor in Asotin, Washington, where he grew up. That's right above Lewiston, Idaho, right in that four corners there. He worked his way through college in the college print shop, so naturally, when we went in together, into the community newspaper, he was in the production and I was in the editorial, so it worked out pretty well. Our first newspaper was the Lewis River News in Woodland, Washington. That was 1951. Three years later we sold that and bought the Clear Lake Observer in Lake County. Stayed there thirty years. By then we had four children.

Swent: So your children are Val--

Hanchett: And Mary Elizabeth is the next one, and then Roberta and Jon, J-o-n Hanchett, and Kathryn, K-a-t-h-r-y-n; Kathryn was born in Lake County.

The Hard Work of Running a Weekly Newspaper

Swent: Whom did you buy the paper from?

Hanchett: Well, it was brothers named Carroll and Leo White.

Swent: Had it been there for a long time?

Hanchett: They had been there about ten years. The paper had been there since 1946. Hadn't been there that long. There had been other papers, but the Observer hadn't been there that long. It was located on the Kelseyville Highway, now Highway 29. So we were actually located in Lower Lake for a long time before we moved the plant over to Clearlake. It was the Highlands in those days. Which was a very good move.

Swent: You were the ones who decided to do that.

Hanchett: Yes. There had been another small paper trying to develop itself in the Highlands for years, but when we moved there, it went out of business, and the Observer was county-wide circulation. We covered the county government. It wasn't incorporated, our community. So we concentrated on the county government.

Swent: Even Clearlake was not incorporated.

Hanchett: No. It didn't incorporate until 1980.

Swent: And how often did your paper come out?

Hanchett: Weekly. We never did go bi-weekly because it's just very expensive, and people just wanted their community newspaper once a week, and they could read it all and then they'd wait till the next week, and that worked out just fine. Of course, it grew. It grew up to thirty-six pages and eight or nine thousand circulation. It was a nice business.

And then we did commercial printing also. We had a big web press, so we did web press printing for other publications as well.

Swent: I'm not sure what a web press is.

Hanchett: Well, it's just big rotary presses that, you know, produce newspapers. That's what they call them. It's a web. It feeds through many units, and the roll of newsprint feeds through these various units. Prints multiple pages.

Swent: Was the equipment all there?

Hanchett: Yes, we had the whole plant, was right there.

Swent: How did you pay for it? Do you mind saying how much you paid for it?

Hanchett: Twenty thousand dollars.

Swent: Twenty thousand dollars. Did you pay outright?

Hanchett: No, it was about an eleven-year contract, five hundred dollars a month. And it was so funny that the very year that we paid out the last contract, we had an account with Safeway, and that very month that we paid the last payment, the Safeway pulled out. We thought, oh, boy, we were going to have a little extra money maybe [chuckling].

Swent: With that big ad every week.

Hanchett: Right. We never forgot that. It was a struggle. It really was. In the early days, what kept us going was the commercial printing. Brochures and things from the mountain resorts, which over time declined and finally faded out.

Swent: Mountain resorts. What--

Hanchett: Like Hoberg's and Seigler Springs and Forest Lake. They were all very big resorts.

The Decline in Mountain Resorts

Swent: The resorts that were up in the Cobb Mountain area.

Hanchett: And the whole aspect of vacations changed with the ability for people to get credit cards and fly here and there. People used to come to Hoberg's and Seigler's and Forest Lake for their whole vacation. They would stay in a cabin, and they would have communal meals, American style, I guess they called it. And we got in just on the tail end of that in the late fifties. That's when it began to change, and it was a profound change.

Swent: And this, you think, was because of flying and the credit cards.

Hanchett: Sure. The whole culture changed around vacations. People no longer wanted to stay in one place when they could fly to all these remote, far-off lands and charge it and pay it over time. So it just gave them a whole new outlook on what they could do with their vacations. So gradually these resorts, which were the prime industry in Lake County for years, other than the agriculture, declined until finally they just went defunct. And it's interesting that they sold to these religious sects, the Yogis, the Yoga cult, and the Maharish--oh, boy, these names escape me. That transcendental meditation outfit? And then the one--he called himself Bubba Free John. And they're still up there. That's a story in itself. These people were very, very highly educated, the followers of this guy.

Religious Sects in Lake County

Swent: Of this Bubba?

Hanchett: Bubba Free John, yes. He's still got followers. He's still going strong. He moved off to some Pacific island finally, but I guess he shows up every once in a while and gives them a pep talk [chuckling] or whatever he does. It was amazing to me the way that they would be taken in by such individuals. They were graduates of some of the highly touted Eastern universities, so I thought, well, okay.

Swent: Did they attract local people as well?

Hanchett: Oh, yes. But not so much. No, it wasn't like that Jim, that horrible thing that this guy in--

Swent: Oh, Jones.

Hanchett: Jones, Jim Jones. You see, he was right in our area, too. Now he attracted a lot of people from Lake County. Very tragic, very tragic.

Swent: Did he have a place here in Lake County?

Hanchett: No, he--

Swent: He had that colony in South America, but--

Hanchett: No, no. He was right up in Redwood Valley. You know, the names are hard to remember sometimes. Just north--it was east of Ukiah.

Swent: Oh, I didn't know that.

Hanchett: That's where he started.

Foiling Bubba Free John's Political Aspirations

Swent: I see. And attracted people from here?

Hanchett: Oh, yes. From Ukiah and from Lake County there were I don't know how many families, relatives, that lost people in South America. I don't know. Lake County just seemed to attract these various sects. This Bubba Free John, he decided he was going to get into the government. We hired a couple of his followers to set type, and then we found out that they were taking out information. We didn't fire them; they really did not know that what they were doing was wrong. But we just made sure that they didn't have access to any stories about them.

Swent: What were they doing?

Hanchett: They were taking information, confidential information. Wanted to know what the Observer was doing, because we were quite a political force in the county for years. Then they put somebody up for supervisor, and they came in and said they didn't want us to let everybody know who this fellow was, with whom he was connected. I said, "Well, I'm sorry. We're going to tell them exactly who he is and who he's associated with." He didn't get elected, of course. We let his followers use the Observer facilities after hours for setting type for his books, which were issued by their own press. A couple of the titles were The Garbage and the Goddess and The Knee of Listening by Franklin Jones, a.k.a Bubba Free John.

Anyway, those are on a different--

Swent: That's very interesting. So you were the editorial writer? You, personally?

Hanchett: Yes, I was the editor and covered all this stuff.

Swent: And if you recommended somebody in an editorial, that--

Hanchett: Well, if we told them the truth about who this fellow was and people knew about this sect and Bubba and kind of looked askance. They didn't understand what they were all about, and naturally they weren't going to put them in their county government. They had more sense than that.

Swent: This was a local person who had joined his sect?

Hanchett: Yes. Well, I don't think he was even local. He just was one of them, and decided that--I don't know. Maybe they thought, you know, these people, they're just country editors, maybe they don't understand, we can get away with this. But there were quite a few interesting inroads confrontations with them.

Swent: But you were able to fire them, though.

Hanchett: Oh, yes. Well, those were the days before you weren't in danger of being accused of sex discrimination and a whole host of other things.

Swent: I was just thinking, you probably couldn't fire them so easily today.

Hanchett: I wouldn't have hired them so easily, either, under today's conditions. I would have known exactly who they were and where they were coming from. You have to. It's very sad. I suppose in a way it's okay, but it just puts you on the defensive. Very definitely.

Building up the Newspaper

Swent: How many staff people did you have on your paper?

Hanchett: To begin with in the early years we had one printer, and Ross, and myself. Then we would have a crew come in and help us mail the paper, and then my oldest son was twelve, and he helped. And then we took on an apprentice, but we were it for years. We would work all night sometimes because it was hot type. The linotype. We had an old, old press, where we had to print two pages up, then turn it over, print another two pages. And it took forever. And then we had to put it through the folder. So all of those stages.

And we had to have it in the mail by a certain time, so often we would work all night before it was press day. That was really hard work.

And then my husband had to keep the thing going, because we had very low advertising volume at the time. He had to keep it going by doing all of his job work after he got the paper out. He had old, old job presses that were continually jamming. It was just horrid. It was really difficult. So that was an era that we look back on [chuckling].

Swent: How long did that last?

Hanchett: It lasted, oh, five, six, seven--and finally, I'm not sure how many years. It seemed forever. Finally, we were able to get a more automatic press, but it wasn't set up right, and it just caused all kinds of trouble for weeks and weeks. That was a nightmare, too.

Swent: Did you buy that new?

Hanchett: No, it was real old. We always had to buy old things. We didn't buy anything new until the hot type was phased out in the late sixties for us. For a lot of others it was--and then offset printing came in, which was an altogether different kind of printing, where you paste up your copy and then take a picture of it and transfer it to a metal plate, and it's water-based some way I've never quite understood. And that was pretty much easier. But that all happened after we moved, and that was in the seventies. But until then we were--

Swent: When you moved. You mean from the Lower Lake to the Highlands?

Hanchett: To the Highlands, yes.

Swent: And then you got newer equipment?

Hanchett: Yes, right. And then we built onto that building and bought our two-unit web press. And as I recall, it was new. It might not have been [chuckling].

Swent: How much would a press cost? Do you remember?

Hanchett: Twenty-five thousand dollars. To us, that was a lot of money.

Swent: How much were you paying helpers in those days?

Hanchett: Oh, gosh.

Swent: Your printer, for example. How much did you pay him?

Hanchett: Four, five, six dollars an hour. Something like that. In the old days. And I can't quite remember--by the time we sold the place, we had about four people in the front office and about ten in the back.

Swent: Oh, you really built it up.

Hanchett: Quite an operation, yes.

Swent: Did you ever have any attempt to unionize?

Hanchett: No. Not up there, no. We were out of the mainstream for that.

Swent: So you didn't have that pressure.

Hanchett: No.

Swent: How were you taxed?

Hanchett: On the property tax?

Swent: Your business tax.

Hanchett: Of course, we didn't have anything like that because the county didn't levy a business tax, and the property tax was not that much because we bought the lot for five thousand dollars [chuckling].

Swent: Well, but that was a lot of money then.

Hanchett: Yes. And then the inflation hit in the eighties. Inflation hurts a lot of people, but it certainly didn't hurt us.

Swent: You were paying--

Hanchett: Oh, it was fantastic. By 1986 it had just absolutely burgeoned in the value, because it was all inflated value. There wasn't anything really there or intrinsic. But we got a lot of money out of the sale because of that.

Swent: How much did you charge for your paper?

Hanchett: Oh, I don't remember that. Probably ten or twelve, about twelve dollars a year. It was a bargain.

Swent: Yes, indeed. Just the paper. Of course, paper prices must have gone up.

Hanchett: Oh, yes. Oh, they have, now, absolutely. Incredible. At least double or more than what we were paying.

Swent: Do you recall any figures? How much was it?

Hanchett: No, my son would remember.

Swent: You bought it by the roll, I suppose.

Hanchett: Yes, we had big shipments come.

Swent: What kind of paper did you buy?

Hanchett: It was in those huge rolls, you know.

Swent: I mean, what brand? Where did you get it?

Hanchett: It was from Zellerbach, and I know that it was a lot less than we would be paying now. I would never want to own another web press.

Swent: Did most people buy a subscription?

Hanchett: Yes.

Swent: You didn't sell many single issues.

Hanchett: And we had a lot of newsstand sales, too, all over the county. We'd distribute them all over the county. It was a well-received paper.

Involving Five Children in the Enterprise

Swent: Did you have a photographer?

Hanchett: Well, actually, my youngest son was the photographer. He was very good at it, very good.

Swent: You gradually plugged your whole family into it.

Hanchett: They all had a hand in it, sure.

Swent: I didn't question Roberta about this because I knew that I'd be talking to you, but you did get all of your children involved in it. [Roberta Lyons, interviewed 26 March 1997]

Hanchett: Eventually, yes. Probably all of them. Even Mary. She has a degree in journalism, and she worked for us and then later was appointed supervisor, board of supervisors. But later she went on to school.

Swent: Appointed or elected?

Hanchett: She was appointed when a supervisor had to resign for some reason. Anyway, it was an interesting--year.

Swent: And she was the one that you said--

Hanchett: Then she went on and got another degree in physics.

Swent: After?

Hanchett: She's got two degrees.

Swent: For heaven's sake. And she's an optical engineer, you said, in San Diego. But the others have all stayed around here.

Hanchett: Yes.

Swent: Let's see. Kathryn is the one who manages your newspaper in Campbell?

Hanchett: Right. Campbell Express.

Swent: What's her name now?

Hanchett: McKaig. She's the McKaig.

Swent: And Val works here in the newspaper with you.

Hanchett: And Roberta.

Swent: And Roberta. And Jon?

Hanchett: Jon is working for Valley Business Forms in Calistoga.

Swent: I see. Not journalism, but printing.

Hanchett: Well, the boys went with their father into the production end. That's normal, natural.

Swent: Well, I think it's a compliment to the parents when they do that, continue with it.

Hanchett: I guess.

Swent: You must have had a very busy life. Did you have household help?

Hanchett: Not really. But the saving grace was that my dad lived with us for fifteen years while the children were so small, so that if I weren't able to be home, why, he would be with them. He was very good with them. He's a former restaurant man, and he knew how to cook. Just enough discipline; he kept them at home. And we were out in the country.

Swent: After the show business? Then he became--

Hanchett: He went into the restaurant business because the movies came in and killed the stage for a long time. It still is defunct except for Broadway, and then their local talent theater is flourishing.

Swent: So he knew what to do in a kitchen.

Hanchett: Yes.

Swent: Well, that was very fortunate!

Hanchett: Oh, it was wonderful. I don't think I could have accomplished what I did without his help.

Swent: And you lived in the house there by the lake?

Hanchett: Where Roberta is. The family home.

Swent: With five children and your father and you and your husband? That's a big family.

Hanchett: Yes. And we had the big dining room, big table, and there would be eight of us for dinner.

Swent: Did you have two cars so you drove back and forth independently?

Hanchett: Yes. Had to, yes. And an old truck. The kids, when they got their license, would graduate to Old Yeller, we called it, a yellow truck [chuckling]. They didn't care. As long as they had wheels.

Swent: And then Roberta mentioned horses, too.

Hanchett: Yes, we had horses. Every kind of animal, pet, you know [chuckling]. Even a pet snake. She had a pet snake. It was fun.

Swent: And you continued with your church?

Hanchett: Yes.

Swent: You're a Christian Scientist. Was there a Christian Science church?

Hanchett: No, we had to go to Lakeport, take the kids to Sunday school and go to church on Sunday in Lakeport. It's still there.

Swent: That's quite a ways.

Hanchett: Yes, it was.

Swent: Did you do anything else in the community? We'll talk about the newspaper in a moment. But did you do other--

Hanchett: Well, I was president of the Chamber at one time.

Swent: That's the Chamber of Commerce.

Hanchett: Yes, the Chamber of Commerce. The Clearlake Highlands Chamber. And I was a founding member of the Soroptimists Club there. That's about it.

Swent: Well, you certainly had enough to do! Let's move on then to talk about the community as you saw it. When you moved in there, you had been up in Washington. Were there differences in Lake County that were a lot different from Washington?

Hanchett: Well, of course, Woodland was a small town, and at that time, Clearlake Highlands was just about the same size.

Swent: What size was it?

Hanchett: About 3,500 people. And mainly a resort town.

Swent: It had its own high school.

Hanchett: Well, the high school was in Lower Lake, but the school district encompassed the elementary school and the Highlands and in Lower Lake. It still does.

Swent: But it was not an incorporated town yet.

Hanchett: No, not till 1980. And it was strictly a resort town. It would absolutely fade away in the winter and early spring, and come to life in the summer. All the resorts were along the lake and in Clearlake Park.

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Swent: What sort of difference did that make? What was the difference between the people in the winter and the people in the summer?

Hanchett: Well, just the local people were there, and they would have their Chamber meetings. They were well attended because there was not very much to do. They didn't even have a movie at first. There wasn't even a cinema. Later, there was a drive-in theater that developed. That gave them something to do. But normally we just lived quiet lives. There wasn't much to do.

Swent: Then in the summer things got livelier?

Hanchett: Yes, but it was very tame. I mean, we had no problem with crime or with gangs or with anything. It was really nice. I could let my children go over to the Highlands and not have to worry. They had the miniature golf and the swimming beaches. Of course, we had our own beach at home. They could get all the swimming they wanted there. But I had no fear. People would wander up and down Lake Shore Drive in the early evening, and it would be very pleasant.

The Plague of the Clear Lake Gnat

Swent: I suppose fishing was the big thing.

Hanchett: Fishing and boating. At one time, of course, we had to face the plague of the Clear Lake gnat. Now, this was a little tiny, very small gnat that would breed in Clear Lake, in the mud. And it was so bad that when you would drive down the street, your windshield would be covered with them, your lights would be covered in the evening. Then you could hardly see. And invariably, at the house, when the children were home and dad would forget, they would invariably leave the windows open in the bathroom, and I'd come home and there would be millions of these things, all over the lights. They were by the billions. They were a phenomenon. And it threatened the whole resort economy. And we were very concerned.

Swent: Did they bite or anything?

Hanchett: No, fortunately they did not bite. It would have been absolutely incredible if they had been a biting insect. But they were such a nuisance, and they were threatening the entire economy. At that time, the Konocti Harbor Inn, the plumbers' union in San Francisco, was developing their resort at Konocti.

Swent: When was this?

Hanchett: That was right in the fifties, late fifties and early sixties. Well, this poor Joe Mazzola. He was manager of the plumbers' union. He had no idea about the gnats because they had been controlling them with DDT. Well, the very year we moved there, the DDT was outlawed because it was killing off all the wild grebes and the water fowl. And so, in the interim, they tried spraying the lake with oil. Can you imagine? The egg rafts. Now, the gnats would lay their eggs and then they'd come to the surface, and they were gelatinous, and they would float. And then they would hatch, and that's when they would fly off in search of food or whatever they did.

So the Mosquito Abatement District hired a biologist to try to control the gnats, and he was just getting his experiments with fish that he thought might be a biological control because we couldn't use these chemicals. We were desperate. Well, the board of directors of the Mosquito Abatement District were a bunch of elderly gentlemen. Very respected, very nice. But there was one--

Swent: They were elected, I think, weren't they?

Hanchett: No, I think they were appointed, yes. But this one fellow from Upper Lake, the Nice area, he got into a fight with the biologist, Dr. [Jerry] Cook, and fired him, right in the middle of his experiment. He was in tears. He came up to me, oh, I was at the fair. "What are you telling me?" I knew nothing about it. Well, he was so distraught. Well, he took a bucketful of these little silverside minnows, and he threw them in the lake. Now, of course, he was supposed to have all kinds of permits from Fish and Game and who knows who else. He threw them in the lake, and they took off. And it was such a big story that it hit Time magazine. They started eating those gnats by the millions, and it has controlled the gnats ever since. They have been gone! Isn't that a story?

Swent: It is, indeed.

Hanchett: And do you know, that to this day--Mr. Jago, bless his heart. He was neighbor of ours for years; I just loved him. But he would never admit--not one member of that board would ever admit that Dr. Cook's silversides had anything to do with it!

Jago would say, "They're just flying onshore and getting caught in the bushes."

Swent: Was he the one who fired him?

Hanchett: Yes, he went along with this other director from Nice. I can't remember his name. So I went down to the biologist that they had hired, and I said, "How can you sit there and tell me that these silversides don't have any impact on these gnats?" And I said, "Have you dissected them to see if they're eating them or not?"

Well, he told me, "For God's sake, don't tell anybody or I'll get fired, but" he said, "the eggs are gelatinous, and they dissolve, and so there's no way that I can prove--they're obviously eating them."

So I said, "Okay, all right. I'll spare you, because I don't want you to lose your job." But I say, isn't human nature something else?

Swent: It had a good ending, though.

Hanchett: Oh, it saved us.

Swent: Did you write the story that got picked up by Time?

Hanchett: I imagine, sure. Oh, yes, we wrote the story. It was so incredible. They multiplied so fast because the food chain was so rich, the nutriments in the lake were so rich that they just absolutely--from one bucketful.

Swent: And the fish that had been there before had not eaten them.

Hanchett: No, they don't. They don't.

Swent: Just this particular kind of fish.

Hanchett: Isn't that interesting? And it's still happening today.

Swent: You haven't had the gnats?

Hanchett: No. It saved Joe Mazzola's neck, because they were desperate. They had spent millions on that place, and it would not have been usable. Absolutely. They were so bad. Isn't that interesting?

Swent: What happened to the poor biologist?

Hanchett: He was fired.

Swent: You don't know what happened to him.

Hanchett: But later on, the Observer decided this isn't right. We had a Dr. Cook Day, and we had him down here, and we gave him a banquet, we gave him a plaque and everything.

Swent: After he had been fired..

Hanchett: He later became a professor at Evergreen College at Olympia, Washington. We got him back down. We said, "This is not right. We have to do something."

Swent: And he had courage enough to throw the fish in before he left.

Hanchett: He said, "I'll be darned if all my years of work are going to go down the tube because of this ridiculous personal feud." And he just took the matter in hand; nobody ever did anything to him. How could they? There was no damage done. No, Fish and Game couldn't say a word. Or they'd better not because the Observer would have really taken them on.

Swent: That's a wonderful story [chuckling].

Hanchett: A lot happened over those years. Really did.

Swent: What were some of the other things? Was there a controversy about algae?

Hanchett: Algae is still a problem there.

Swent: Is that political at times, as well?

Hanchett: Oh, sure. But algae was a topic of a ten-thousand-dollar study by a Dr. Horn from England, and it's still sitting on a shelf someplace up there in the county seat. He basically said that it was a 10,000-year-old lake and that it was just a normal occurrence and that you had to be careful, because the algae--if you upset the balance of nature too much by trying to control it or remove it, you would create other problems. So that kind of put it on hold as far as the algae was concerned.

Swent: And it's only for certain parts of the year, isn't it?

Hanchett: Yes. So now they're letting a contract and let some firm harvest it. I don't know whether they have referred to Dr. Horn's study or not. Chances are, they haven't. But, of course, I'm out of it now. If I had been up there, we would have certainly taken another look at that study. But maybe they have.

The Observer Fights Scotts Creek Dam and Saves Clear Lake

Hanchett: But the main struggle we had was to save Clear Lake. Literally save Clear Lake.

Swent: How did you do that?

Hanchett: Well, it was interesting. You see, Clear Lake is an irrigation source for Yolo County, and the water goes down Cache Creek and irrigates all those tomato plants in Yolo County. And that was established years ago by the Clear Lake Water Company that originally began to sell water out of the lake. They built a dam on Cache Creek, and it's still there. That's the way the lake is operated.

Well, as years went by, there were a lot of farmers in the county who thought it would be great to dam up a lot of the tributaries on the creeks that feed into Clear Lake. One of them was Scotts Creek dam, in Lakeport. And Lakeport was very interested because it would give them a much-improved water source. So what happened was the board of supervisors made an agreement with Yolo County Water District, which is the one that

uses the irrigation. And they said, "Okay, we'll let you build Scotts Creek dam, and then we will have other arrangements about Clear Lake." In the meantime, they were building another reservoir on another branch of Cache Creek in Indian Valley.

Swent: "They" being the Yolo water board.

Hanchett: Yolo Water District. And I'll never forget the water manager, the manager of the Yolo County Flood Control District. He called me up.

Swent: What was his name?

Hanchett: Willard Hansen. And Willard called me, and I said, "Oh, you know, that's great. That Indian Valley project will take the pressure off of Clear Lake."

He said, "Not exactly."

And I said, "What do you mean?"

He said, "They intend to take the water out of Clear Lake first and use Indian Valley as a reserve."

I said, "What! You can't mean this!" See, what I thought was, well, they'll take it out of Indian Valley and save our water, because the water level in Clear Lake is absolutely imperative for the resorts, for our recreation, and for just the quality of life.

Well, that's when the fight started. In the meantime, John Jago had formed the Clear Lake Water District, just to protect the "rimlanders," he called them, people on the waterfront, from inroads on Clear Lake water, because of its position vis-a-vis Yolo county. Well, the Jagos and the Observer combined. Jago gave me the technical information. Irene [Jago] wrote it up. And we published it and editorialized and raised hell. And I tell you, it was a tremendous fight, because the board of supervisors were all going along with Lakeport and with the Yolo County Water District, and they just thought it was great.

What they were going to do would have taken the lake to zero on the Rumsey Gauge--

[Mrs. Hanchett supplied the following explanation of the Rumsey Gauge when she reviewed the transcript]:

The Rumsey Gauge is an historic measuring device installed on the City Pier in Lakeport many years ago when the Gopecevic Decree was issued to govern the operation of the lake in conjunction with the Clear Lake

Water Company (builder of the Cache Creek Dam) and the irrigation water users in Yolo County. The gauge measures lake levels between 7.56 feet and zero. The court decree established limits on how much water could be taken from the lake for Yolo County users on any given year depending upon the height of the lake level the first of April. The Solano Decree supplanted the Gopecivic in later years.

--40 percent of the time. Now, we had fought and fought, and we were losing. Finally, Jago got hold of this engineer. He did a computer run, and that's what saved us. The computer run showed that Clear Lake would go to zero 40 percent of the time. But, you see, you've got diminishing returns, because it's a marginal lake anyway. And so if you're going to take it to zero forty years out of a hundred or however it was, it would not recover, because you don't get that much water. You've got drought, and you've got all kinds of things. So we ran a headline. We had big wood type. I still have it. It's an antique now. "IF YOLO PREVAILS, CLEAR LAKE WILL DIE!" And we sent it all over the county. And that finally got through to the people. They just didn't understand until then what was happening.

The county counsel, who was in the board's pocket, would never admit anything, so finally they had a public meeting that the board of supervisors had to call. They had to do something. This was just too hot. So they called a public meeting. It was so big they had to hold it at the fairgrounds. And they had to build a little stage. I'll never forget. A Mr. Luce was the district attorney. He wasn't county counsel then; he was district attorney. He was elected to represent the people, but he was representing the board of supervisors. And he finally got up and said, "Well, I'm afraid that it's the truth, that it would seriously impact Clear Lake." What a day that was! I tell you!

Swent: That's a triumph for the free press!

Hanchett: Oh, that was great. Because, you know, when you take up a cause and you know that basically you're right, you're not trying to con anybody. They were trying to con people. And the Jagos were never the kind of people who would ever try to pull anything. We were just trying to save the lake, and so what happened was the Clear Lake Water District had filed a lawsuit against Yolo District, and the board had to come in as friends of the court. Then they had a motion. We had a top-notch water attorney from Sacramento, and he filed a motion, asking the court to please consider this on environmental basis. And we got word from the directors of the Yolo. He said, "If we lose that motion, we've lost the case." And that was it--we won it.

It was in Solano County. That Solano decree is still in operation. The last Irene and I had to do with Clear Lake Water was we went to the board of supervisors last year, when they were building this pipeline to reinject effluent from the sewer system in Clearlake into the Geysers. And we found out that they were going to have to use Clear Lake water, and so we were told, "We won't change the curves." Now, the curves are part of the Solano decree.

[The following information was added by Mrs. Hanchett when she reviewed the transcript.]

The Solano Decree determines how much water is available for the Yolo County Flood Control and Water Conservation District for irrigation from May through November of any given year. If the level of Clear Lake is at 7.56 on the Rumsey Gauge, located on a pier in Lakeport, May 1, the curves outlined in the Decree determine the amount of water Yolo can withdraw through the District's Cache Creek Dam each month throughout the irrigation season. Yolo can draw on water in the lake during this season between 7.56 and 3.22 on the Rumsey Gauge. Yolo has this date (the curves) which gives it the percent ages available each month and operates its withdrawals in accordance with it. If the lake is at 3.1 or below on the Rumsey on any May 1, Yolo will have no water available to it that year.

It's how much they would take out of Clear Lake at any given time, depending upon the level which is reached during the winter. They went ahead. They changed the curves. But I don't have a newspaper any more, so they didn't have to care what I said. And the newspapers up there, they didn't even know about it. They didn't even understand it. It's just pathetic.

Swent: Yes, it is. When was this?

Hanchett: That was in the seventies. And it continued for some time. I even made a trip back to Washington, D.C., to talk with [the Department of the] Interior. Told them what our side of it was. Because they were going to help finance their dam.

Swent: The Indian Valley dam.

Hanchett: Yes.

Swent: Did they build the Scotts Creek dam?

Hanchett: No, they never could build it.

Swent: The Scotts Creek one they never built.

Hanchett: Too bad [chuckling]!

Swent: But the Indian Valley one--

Hanchett: They did build that. But they cannot use Clear Lake first. They have to use that first.

Swent: Well, you were running quite a battle there.

Hanchett: Oh, it was a fascinating time. I had a lot of scrap in me in those days [chuckling].

Swent: Well, our newspapers are a wonderful, wonderful feature of society.

Hanchett: Yes, if you really are dedicated to your job of what you're supposed to be doing. But if you're just running organs of advertising, why, that's something else again. And we're still as militant here if the occasion warrants it. We'll speak out.

Swent: You had mentioned that there was very little crime in the early days when you went there.

Hanchett: Early days. A lot different today.

The McLaughlin Mine: Good News without Uproar

Swent: Well, let's talk about the mine. The mine was discovered in 1978; that is, the gold was discovered there. There had been mining there before, some mercury. Were you aware of that?

Hanchett: Yes, but it was very dormant during that period. It tried to revive, and I'm not just sure. The price of mercury, for some reason, went up quite high, and so people moved in to try to reactivate the mines. They restarted the mine that was on the way down from Lake County to Williams.

Swent: Is that the Sulphur Bank?

Hanchett: No. That never was. That's on the lake. That's right on the lake. This one--if you were ever to drive by, you'd see some of the old wooden structure there. And they tried to revive that, because I know the miners came in and talked to us because they were having a labor dispute with the owners, and that's why I remember that. But it didn't last. Evidently, the price went way up--

Swent: I think it was in the fifties. There was a spike in the mercury price for some reason.

Hanchett: I think so, yes. And then it just faded again. So that's the only mining that we were aware of. I was on a trailer trip with my husband when the news broke about the gold mine, and we were-- everyone was just astonished and thrilled. It was very exciting for everybody.

Swent: You hadn't had any inkling of it ever.

Hanchett: We never had a clue. When I got back, it was even more interesting because of the fact it was microscopic, and that they had to go through all of these chemical steps to extract it, and we were very interested. We did many articles about it. We went out and took pictures. I remember one picture we took. It was this huge earth mover, and this little tiny woman was driving it, and we got a picture of her standing by one of the wheels, and she looked like a little doll in front of that. It was quite a news item to think that a small woman like that would be driving such a huge machine.

We did many stories about it as time went on. As I said, we were very much concerned because of the cyanide in the process. We learned as much about that as we could as to how that was going to be controlled. But it just seemed like the McLaughlin Mine people, the Homestake people, knew how to deal with these concerns because it never escalated.

Swent: I remember on the phone you mentioned that you were always surprised that there was not an uproar about this.

Hanchett: Yes. And I was glad that they were able to satisfy the concerns of the county about transport and how it was to be contained and everything. But they had such a good plan, and the people never did become excited about it or concerned, as I recall. Because there would have been noisy hearings before the board and before the planning commission, and they never materialized.

Swent: Evidently not.

Hanchett: No, they had very good control of it. Well, they just knew what they were doing. They were very professional, and they were able to satisfy people that it would not contaminate. And I guess in those days you didn't have as many activists. I'm sure today there would have been an uproar that wouldn't quit.

Swent: Probably.

Hanchett: Because they had to bring it in, you know.

Swent: There was no question of drainage into Clear Lake, was there?

Hanchett: No, no, no. It is way out in the valley. There was no concern about that. That I remember. It just went along very quietly. We had quite an economic impact because of the people that were hired.

Swent: How did that impact the community?

Hanchett: Well, they had these people coming in, like my son-in-law, who had to find lodging.

Swent: That's Dennis McKaig?

Hanchett: There was no lodging at the mine. So they found places to live, and that helped the resorts; and, of course, they had their payroll, and that was quite a substantial payroll because all of the processing went on in Lake County, so most of the people that worked in that end lived in Clearlake or Lower Lake. So it had a very positive impact.

William Wilder, Benefactor for Clearlake

Hanchett: Another major impact was that Mr. Wilder, who owned the mine, who benefitted financially, has been quite a benefactor for Clearlake. He built the cinema, and he gave the town the property for the new library.

Swent: It's a lovely library.

Hanchett: Yes, and without him, I don't think we would have much of a library today. So that was an offshoot of the mine that had a really good impact on the community as a whole.

I remember the time when they had the first gold bricks, and gold to show. So they had a big deal.

Swent: That was what? The spring of '85, wasn't it?

Hanchett: Yes, it was. My husband and I went to that. They showed us all around and showed us the gold bricks. It was very exciting. They gave us a lovely medallion. I still have it. As a keepsake.

Swent: Not gold.

Hanchett: Well, no, but it looks like gold.

Swent: Maybe it is!

Hanchett: I doubt that. It's too big. It's not that big, but it's gold-colored. It was very well done. We would at times go out and watch them digging. That was quite a sight, the pit that they dug. I haven't been out there since to see how they're into the restoration phase.

Swent: Let's go back to your son-in-law. What was his job?

Hanchett: He was in heavy construction. He's an earth mover. He doesn't operate the machines, but he does the grading and he does all the surveying and the mathematics and everything to show them where to dig and so on. That's what he does for a living. He's been in it for years and years.

Swent: And he met your daughter here?

Hanchett: Yes. He met Kathryn. Then, after that, they were married, and they're still married. He has a good job now with Silva Contracting Company, big outfit in San Jose. So they're doing quite well.

Swent: Well, good.

Hanchett: Yes, that was great. He's a dear. I love him a lot.

Recent Rise in Crime in Lake County

Swent: I was wondering if there was any particular difference in the community when the construction people came and again when they left.

Hanchett: Well, no, actually, there weren't that many, in the first place. And then they did hire local people, too. And the people that actually worked in the processing were--I'm not sure just what level of expertise they had to have, but it obviously must have been something, so there wasn't a negative impact on the community in that respect at all.

Swent: Did the crime rate rise with the larger population?

Hanchett: No, no, it didn't. No, the level of crime in Clearlake occurred after the town incorporated.

Swent: When was that?

Hanchett: That was in 1980. Even up to the time that we sold in 1986, we hadn't noticed any really serious increase in crime. But for some reason, after that, it just really got out of hand. It's been

very serious. The local council, unfortunately, had a very rocky start.

Swent: You mean the town council.

Hanchett: The town council. The first two years, why, it was reasonably quiet because it was just in the formative stage. But once the council got established, then they started having feuds among the members, and it just was a disruptive influence. Then the decline of the resorts, you see, occurred, so that left a lot of these small, sub-marginal cabins that used to be rented out in the summer, were then being rented to real low-income and welfare people, and druggies.

Swent: Well, I understand that there's always been sort of a drug subculture here, hasn't there?

Hanchett: Yes, oh, yes, definitely. But it didn't erupt into such major crime. They were rather quiet about it. They didn't have the murders and the assaults and the serious armed robberies. Now it has really been appalling what has developed. No, there were drugs, definitely.

Swent: What kind of drugs were they?

Hanchett: Mainly marijuana, not the hard stuff.

Swent: This would only be hearsay, but was this an area during Prohibition where there was bootlegging?

Hanchett: Now, that is an area of history that I don't recall. I know that it destroyed the wine grapes, Prohibition, because it was quite a region for growing wine grapes. And that only started up again, I think, in the late seventies. They started converting some of the orchards to wine grapes, and now Lake County grapes are rated quite high.

Swent: It used to be pears.

Hanchett: Yes, pears and walnuts. Pears and walnuts.

Swent: It still is pears and walnuts, but--

Hanchett: But now we've got three or four wineries and very flourishing vineyards. But during Prohibition they were all torn up and planted into orchards. We didn't have any. So that was quite an impact. If you talk to some of the people that remembered it.

Swent: So there wasn't a big bootlegging organization.

Hanchett: Well, there might have been, but I just never thought to talk about that.

Joe Mazzola and Konocti Resort

Swent: Has there been any Mafia pressure, presence, that you know of?

Hanchett: That, I think, had a little bit to do with the plumbers union.

Swent: There were rumors of that.

Hanchett: Yes. They never would admit to it, but I'll tell you, the first encounter we had with Mazzola, here he drives up in this big black limousine, and all these guys pour out of it in their black suits, and they come running up the steps. We were on the Kelseyville Highway then. And they came into the paper, and we thought, "What in the world is going on?"

And they went, "Well, we're buyin' the Renfro estate, and we're gonna have this great big--" And they just were bragging all over the place. So we, of course, broke the story. We were the first ones to break the story about that. And they invited us out. I followed Joe Mazzola's career in Lake County the whole way.

The Clear Lake Water Quality Council was formed to try to protect Clear Lake at the time. He let us meet in his meeting room at the clubhouse. Then he decided one day, when we were having our board meeting, he came in and he was going to outline everything he was going to do, using the Water Quality district--Council--it wasn't a district; incorporated. And so my friend and I, we were co-chairmen. Teresa Rifes was the first clerk of the new city of Clearlake. And Teresa and I were co-chairs of the Water Quality Council. So we told Joe. I said, "Well, I'm sorry, but you're not taking over the Clear Lake Water Quality Council." And he was just absolutely floored.

Swent: What did he want to do?

Hanchett: Well, he wanted us to just sit back and let him and his guys go to Sacramento and do all these things in our name, where we had nothing to say.

"You just sit back, ladies, and relax, and we'll take it over."

And I said, "I'm sorry. You're not going to do that."

I remember he asked me over in the coffee shop. He says, "You're just making a big mistake. I don't understand this." And he said, "You know, Bonny, we could hurt you. We could really hurt you."

I thought, "Boy, if that doesn't sound like the Mafia." I said, "Well--"

Swent: What sort of issues was he going to take to Sacramento?

Hanchett: It was mainly about the gnats. That was before the gnats were controlled. He was so desperate, and I understood. I said, "Well, I understand how you feel, but you can't take over the Clear Lake Water Quality Council." Boy, he stormed and strutted around, but he never did anything. You know, Italians are funny. And he wasn't used to dealing with a woman. I imagine if it had been a man, he'd be down there planting a bomb or something. Here we were, two ladies. "Well, okay, do what you want. You don't scare me!" So he just didn't know what to do. But fortunately for him, this other thing developed. But it was some time later. But he backed down.

Swent: Did he ever pressure you again on anything else?

Hanchett: No. No, he never did [chuckling], fortunately. Poor Joe. He was killed in a jeep accident in Lake County. He was up in Bartlett Springs, and the jeep overturned. It was sad to hear that because I always liked him. He was bombastic, but he really built a wonderful resort.

Swent: It's a beautiful place. I've seen it.

Hanchett: The new manager is doing wonders with it. They're bringing big-name musicians.

Swent: Is it still owned by the plumbers?

Hanchett: Oh, I think so. The plumbers and their contractors. The contractors had to match the money some way in their work agreement.

Swent: It's a beautiful location.

Hanchett: Yes.

Swent: But you faced him down.

Hanchett: Yes. I don't know. Maybe my religion or something, but I just didn't have any fear of him because he had no reason to--what could he do? Fortunately for him, things turned out quite well, and I was glad because it turned out well for everybody.

A Flap Over Putting Sewers In

Swent: Did anybody else ever try to pressure you?

Hanchett: Oh, yes. We had a big flap over putting the sewers in.

Swent: When was that?

Hanchett: That was in [pausing] early, oh, golly, later sixties. We had to put a sewer system in Clearlake, before it was incorporated. The supervisor at the time, Al Shipley, was in with this company, and there was all kinds of stuff going on that we didn't feel was right. So we took issue with--

Swent: In getting the contract, you mean?

Hanchett: That he was going to contract with them, and their whole project didn't, as I recall, it just didn't seem right at all. So we took him on, and he decided to fight the paper. If you're going to fight a newspaper, you better make darn sure you're in a good position to do so. It ended up that he filed a million-dollar lawsuit against us. Oh, yes, and he was telling everybody that I was not telling the truth. They called me the "hatchet lady." [chuckling] The ones on his side called me the "hatchet lady." And then the rumor got around, and they spread the rumor--Well, Bonny, she's just a woman scorned, and she and Al Shipley had an affair and he dumped her. Just an absolute lie. I just laughed.

And, you know, people still remember that to this day. It just came up recently. These people that are connected with our family now brought it up to my son, and he said, "You know, there's never any truth to that." And, of course, who's going to believe you? "No, it was just a rumor." But anyway, we ended up, Shipley was defeated and subsequently had to leave the county. Another firm came in, and we put the sewers in.

Swent: There was a new sewer line and water line in Lower Lake that Homestake assisted with, helped with.

Hanchett: I don't believe anybody objected to that.

Swent: They did the road and the traffic light there and also did something to the sewer and water system there in Lower Lake. But maybe that wasn't a controversy at all.

Hanchett: No, it wasn't. No, that was an improvement!

Swent: Well, certainly for most people I'm sure it was, yes. And the schools, of course. There was a big impact on the schools with this bigger population coming in.



Bonny and Ross Hanchett, 1983.

Photograph by Steigers Studio

Hanchett: Right. But they accommodated. Brought in those portables and got along just fine. Hired more teachers.

Getting Yuba College in Clearlake

Swent: Let's see. Highways. And the junior college. We haven't mentioned those.

Hanchett: Oh, that was another one! At the time, why, Mendocino County, the junior college, and Yuba were interested in coming into Lower Lake. Well, we knew, the Observer knew that if Mendocino came in, that the main campus would be in Lakeport. We would get zilch. It would just be a little adjunct. Everybody would have to go to Lakeport to go to school, and it was not acceptable. Whereas Yuba was willing to build a campus between Lower Lake and Clearlake where it is obvious. But it was a real problem as to whether we could get the public educated enough to see, because it was going to go to a vote. So we really worked hard on that one.

Swent: When was this?

Hanchett: Gosh, I'm no historian. I can't tell you. I'm sure Harry [Lyons], who is professor there, Roberta's husband, could tell me. I could fill that in later.

Swent: Okay.

Hanchett: So we got a consultant kind of fellow that showed us how to present Yuba's side of it. We followed his advice, and the paper helped, and we won. I think that's very important.

Swent: So this community college is actually from Yuba County, not from Lake County.

Hanchett: No, it's Yuba.

Swent: It's a branch of Yuba County.

Hanchett: Yuba City. And it's their satellite campus. They built a beautiful campus. Mendocino never did build a campus in Lake County. We would have just been out of luck because had they been able to take in the whole of Lake County, instead of just the northern part, they would have built a campus and it would have been in Lakeport.

Swent: Because that's closer to Mendocino.

Hanchett: And now we've got this beautiful campus. I don't mean to imply that the Observer alone did this, but it was the causes that we took up that we felt were valid and were worth fighting for. That gives me a good feeling, that we really did make a difference.

Swent: Oh, I'm sure you did. What about the Redbud Hospital?

Hanchett: We were there, yes, when that was formed, and I used to cover the district meetings. They had a lot of growing pains in those days because they were always just on the edge, and they would always be so short of money because Medicare is very slow in paying claims. It was really difficult for them. And then they had difficulties with the various directors, heads.

Swent: About issues?

Hanchett: Personnel. Personalities among the board of directors and the chiefs or doctors. A lot of personalities and volatile people. But we covered that and helped get it started with the district. We were in favor of that, too. That was a big step forward. Although Redbud has always had financial troubles. It started out with not enough capital. But recently it had a vote that this Seventh Day Adventist company was going to take it over. I don't remember now whether it passed or not.

Swent: The same people that have the hospital down in Napa County?

Hanchett: It might be, yes. Yes, they're heavy into medical.

Swent: I think that's quite a good hospital. At least I've heard that it is.

Hanchett: Yes, yes. The SDAs ran the Lakeport Hospital for years. I haven't really kept up with Redbud too much in the last ten years, but I do know they recently had a vote on that.

Swent: What about the gambling? The Indian casinos. Was this ever something your newspaper had to deal with?

Hanchett: No. That came afterwards. We have a casino down here. We had a story this week, in fact, about their difficulties, and Roberta wrote an editorial, spelling out the downside of gambling and that it just really is something that can't be overlooked, the impact it has on people and addiction, and it's just basically not a wholesome thing to do.

Swent: It's spreading like wildfire everywhere.

Hanchett: It certainly is. It's too bad, that they had to find that to pull themselves up. I went in there a couple of times. It's Sho Ka Wah. You passed it.

Swent: I saw the sign.

Hanchett: And it's so dismal. It's such a dark and gloomy place. And these people are just pouring the money into these machines. I went back to the cashier's place, and they just have these bins full of currency, you know? And it's coming out of people's pockets that can't really afford it. And that's sad.

Swent: They call it recreation.

Hanchett: So we are not banging the drum for them in that respect. We say it's unfortunate that a lot of jobs will be lost. That's true. But you have to look at the cultural, the societal damages, too. We have bus loads going from Cloverdale up there. I don't understand it.

Swent: Now, the penitentiary flap, of course, was another one, but--

Hanchett: We were gone then. We would not have been for that.

Swent: Well, the mine now is getting into its reclamation phase. You had left by then.

Hanchett: Yes, I was gone.

Selling the *Observer* and Buying the *Cloverdale Reveille*

Swent: I think maybe we should just say a little bit about your leaving and deciding to stay.

Hanchett: Well, my husband was declining in health. He wasn't a Christian Scientist. And the children were--I could see that the paper was not going to grow enough to accommodate them all, and it just would cause problems down the road. And they were all very willing to go out and seek their fortunes and see what they could do. And so we determined to sell it. We sold it in July of 1986.

Swent: How do you go about selling a newspaper?

Hanchett: Originally, we had signed up with a broker that sells newspapers. But we couldn't come to terms with anyone that had looked at it. So his contract ran out. Well, this friend of mine in Lakeport. He was a newspaper man, and it was so funny. The thought just came to me. "Why don't you call Dean DeVries and see if he'd like

[to buy the paper]." Because he had talked to me a couple of years before about maybe wanting to buy the Observer. And so I called him up, and he said, "You know, Bonny, I was just going to call you." And we came to terms. It was a very good deal for us, and didn't turn out too well for Dean because he just subsequently lost interest in it. I wanted to get it sold to somebody other than the chain that had come in and purchased the Lakeport paper. They had been very unpleasant with us. The fellow who was the publisher would make snide remarks about the paper and tried--

Swent: This is from Sacramento?

Hanchett: No, from Erie, Pennsylvania. They wanted to buy the Observer initially; they ended up buying [the] Lakeport [newspaper]. And even tried to make trouble with us with Safeway, claiming that we were leaking their prices to another grocer. You know, all kinds of things like that. My husband was ill, and I'd had it, you know, after thirty years. All those battles, and the children were grown, and I about had it. And so I called Dean, and he agreed to buy it. It was really hard to give it up and to see all the children scatter, and then to lose my husband just seven months later; it was a terrible time.

I stayed up at the house after he died for a few months, and when Dean called me--he happened to own [the] Cloverdale [newspaper], and it was, oh, several months later. It was on into 1988, so it was almost a year. It was over a year. That was a terrible year.

Swent: You said your son was ill, too.

Hanchett: Yes, he was ill. The other children were trying to get themselves established with other jobs. My oldest daughter had graduated and was trying to get herself established in the engineering and research field. And so Dean called me, and I thought, "I can't sit up here in this house much longer." Too many memories. And wanted to know if I wanted to buy the Cloverdale Reveille. So I came down and looked it over. Nice little town. It was just the right size. I didn't have to really go through all I had to do because on the Observer I not only at first had to do all the editorial, but I had go out and sell the ads, too. And keep the books. My dad helped me keep the books. So this seemed like a piece of cake. So I bought it, and moved down here in 1988. Been here ever since. It's been a very nice experience.

Swent: And your son now?

Hanchett: He came in. It's just been about a year and a half he's been with me. He used to be a salesman for Healdsburg Printing. So it's worked out beautifully. And then Roberta works two days, just long enough to keep her oar in. She covers the sports, and she

writes a column, and she covers the schools. It's quite a lot to cover, even in a small town, if you want to do your job.

Swent: Sure. And this is the only paper.

Hanchett: So the paper has prospered, and it's starting to grow a little bit. We don't know exactly what the future holds, but the town will grow. There's no question about that.

Swent: What happened to the Observer then? You said Dean DeVries bought it and--

Hanchett: He sold it to the very chain that I was trying to keep out. Now there's no competition up there whatsoever.

Swent: Had he owned a paper in Lakeport, you said?

Hanchett: No, but he owned the Ukiah Daily Journal at one time. Partnership. And he owned newspapers in Missouri. But he owned a home in Lake County, always lived in Lake County part-time, and the Observer was a good buy. If he hadn't lost heart and got--he was older, too, and so he just, "No, I don't want to hassle these people. I'll just sell it to them." I didn't put that in the agreement that they wouldn't sell to them. I don't think he would have gone for that anyway. So now poor Lake County has no voice on anything.

Swent: So it's the Observer and the paper in Lakeport.

Hanchett: Lakeport Record Bee.

Swent: Record Bee. And they're run by the same people.

Hanchett: Yes.

Swent: But they're not local people.

Hanchett: No. Erie, Pennsylvania. It's sad.

Swent: So it's not really a locally oriented paper, then.

Hanchett: Well, their bottom line isn't locally oriented. They, of course, run local news. But they don't go to the bat for anybody like we did, or take up a cause. Unless they think it's going to be financially beneficial for them. Like, they were all for the prison. Things like that. But they don't pay any attention whatsoever to Clearlake and what impacts Clearlake.

Swent: Yet the prison was defeated, so they didn't have that much influence, did they?

Hanchett: No. And Roberta was real active in that. She knows how to do things, and she was able to get articles in the Observer. Yes, she worked very hard on that. So we still have a voice up there.

Swent: And it sounds as if you still care what happens over there.

Hanchett: I sure do because it's a beautiful county, and there's so many things that could impact it. And the lake, especially, is quite a valuable asset.

Swent: Just driving around the little bit that I have, it looks to me that it might be more attractive now as a resort again, a resort vacation area. Napa County is getting crowded, and Sonoma County is getting crowded. Don't you think people might spill over into Lake County now?

Hanchett: Well, in fact, it has grown a great deal. There were about thirteen thousand people in the whole county when we moved up there. And it's so interesting. You look back in the archives and see that in 1920 they predicted there would be fifty thousand people by 1954. But it took until almost 1990 to reach that.

##

Hanchett: The city of Clearlake was incorporated in 1980. The Observer was very supportive of this move and followed the organization of the new city closely. The first city council experienced a lot of turmoil which lasted through 1986 when we sold the Observer. We were always sorry to see this happen as there were so many important issues to be resolved. As the years went by the city went downhill with a high crime rate and substandard housing. The situation is improving somewhat today but the community is no longer the safe and quiet town that we once knew. I hope they can do something. I was very sad to see that happen.

Swent: It's got kind of a bad track record right now, hasn't it?

Hanchett: Oh, a very bad reputation. It's got a terrible reputation.

Swent: What do you suppose is behind all of this?

Hanchett: The only thing we can figure is the influx of that element being able to find such low-cost housing. It seems about the only answer we could come up with. And it's a mecca for welfare, not that welfare people per se are into that, but they are prone to be into the drugs, it seems, I guess. Although I don't know. With the market the way it is, I think that affluent people are the ones that are really buying. So there's certainly a market for it. It's sad.

Can I offer you a cup of tea or something before you go?

Swent: Have we finished, do you think?

Hanchett: Yes, I think so.

Swent: All that you wanted to say. Well, I think we've got a wonderful sense of what a small town newspaper person can do when she has courage and integrity.

Hanchett: Oh, well, it was a great career. I can look back on it with a little satisfaction.

Swent: I would think so.

Hanchett: That we were able to meet these challenges. Of course, as I said on the tape, I certainly couldn't have done it alone.

Swent: Did you ever consider going into politics yourself?

Hanchett: No. I never did.

Swent: But I'm sure you were approached.

Hanchett: Well, I had enough and saw the inner workings of it. I'm a journalist. Not a politician. And there's a difference.

Swent: Yes, there is. Thank you very much, Bonny.

Regional Oral History Office
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Berkeley, California

Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

James H. Hickey

DIRECTOR OF CONSERVATION, DEVELOPMENT, AND PLANNING FOR NAPA COUNTY,
1970 TO 1990

An Interview Conducted by
Eleanor Swent
in 1994

Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

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It is recommended that this oral history be cited as follows:

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James H. Hickey, 1992.

INTERVIEW WITH JAMES H. HICKEY, DIRECTOR OF CONSERVATION,
DEVELOPMENT, AND PLANNING FOR NAPA COUNTY, 1970 TO 1990

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INTERVIEW HISTORY--James H. Hickey

James Hickey was Napa County planning officer for many years, including the period of the McLaughlin Mine permitting. Born in Ohio in 1927, he studied and worked there in urban planning before coming to California and working for ABAG, the Association of Bay Area Governments. He brought to the Napa County job a great deal of practical experience in planning, although dealing with a gold mine was new. He has the professional credentials, the personal skills, and the credibility in the community which enabled him to work in liaison with Homestake, Napa County residents, and the officials of the other two counties and see that the hundreds of permits for the mine could eventually be granted. As we interviewed, it seemed to me that everyone concerned was lucky that Jim Hickey was there at the right time. Several other interviewees expressed this same opinion.

The invitation to participate in the oral history project was sent to James Hickey in June 1994 and the interview was conducted on 12 August 1994 at the office of the Napa County Land Trust which he now heads, following his retirement from the county. One of his accomplishments twenty-five years earlier had been the establishment of the Napa Valley Agricultural Preserve when vineyards were prime targets for housing development. On the day when we met, his colleagues were busy preparing for the twenty-fifth anniversary celebration to be held in a few weeks in Yountville.

Later we had lunch at a creekside restaurant in the center of town, and I left just ahead of a group of longhorn steers running through as part of the annual Napa Days parade; it was a forceful reminder of the agricultural heritage of this beautiful valley.

The tapes of the interview were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Hickey for review in January 1998. He reviewed it thoroughly and returned it in May with a number of changes for clarification of details, some added material, and some formalizing of diction. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The James Hickey interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1996, as part of the ongoing oral history series devoted to Western

Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent, Project Director, Research
Interviewer/Editor
Regional Oral History Office

The Bancroft Library
Berkeley, California
June 1998

Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name James H. Hickey
 Date of birth May 29, 1927 Birthplace Saginaw Michigan
 Father's full name James E Hickey
 Occupation Railroad Birthplace Saginaw Michigan
 Mother's full name Esther Bishop Hickey
 Occupation Office Administator Birthplace Saginaw, Michigan
 Your spouse Virginia Rigby Hickey
 Occupation Human Services Admin Birthplace Canion Ohio
 Your children Kathleen, Brian, Mark, Janis and
Shannon
 Where did you grow up? Saginaw Michigan
 Present community Napa California
 Education B.S. Michigan State University
Dept of Urban Planning and Landscape Architecture
 Occupation(s) Director City, County and Regional
Planning Programs Michigan, Ohio and California
 Areas of expertise City, County and Regional Planning
 Other interests or activities MUSIC and TRAVEL
 Organizations in which you are active Napa County Land Trust
Napa County Dixieland Jazz Society

INTERVIEW WITH JAMES HICKEY

JAMES H. HICKEY, DIRECTOR OF CONSERVATION, DEVELOPMENT, AND PLANNING DEPARTMENT FOR NAPA COUNTY, 1970 TO 1990

Early Years, 1927-1952

[Date of Interview: August 12, 1994] ##¹

Swent: Let's begin, Jim, by your telling where and when you were born and something about your education and training and how you became interested in planning and conservation.

Hickey: When and where I was born: May 29, 1927 in Saginaw, Michigan. My education in part was through Michigan State University after World War II.

Swent: Where is that?

Hickey: Michigan State University is in East Lansing, Michigan. It was an agricultural college. It is the land grant college in the state of Michigan as opposed to the University of Michigan. I had taken classes in geology, considering a geology major but dropped it. I also had worked at a major in civil engineering. Following World War II, I had been working with the Consumer Power Company and was taking an engineering degree to return to work with that company.

Swent: Did the war interrupt your education?

Hickey: Actually, I went to school on the GI Bill. [Servicemen's Readjustment Act]

Swent: Please tell a little about your war service.

¹## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcripts.

Hickey: Well, mostly I caught the end of the war and that was really the first opportunity I had to see California. I'd been stationed in the Bay Area and went to join the occupation forces in Japan, as a matter of fact.

Swent: You were with the army?

Hickey: With the navy. I was with the amphibious [forces] in the navy. I came back from the navy through California and went back to Michigan. But in the back of my mind, I remembered the hot days and the cool nights and the lack of ice and snow. Later on, when the particular job that brought me to California was open, it was just too much of a temptation. So I moved the family to the Bay Area.

Planning Director, City of Oak Park, Michigan, 1952-1955

Swent: Let's go back to Michigan. You went back to Michigan to college and then you worked first there?

Hickey: Yes, I worked for a city in the Detroit metropolitan area, called Oak Park. Oak Park, Michigan, was a World War II suburb that incorporated in order to protect itself from the City of Detroit. The job there was in urban planning: to plan the future of the city, which we did. We subdivided the entire community with streets and home sites so that when an individual property owner came to develop his portion, it fit like one piece in a giant jigsaw puzzle. When the whole thing was done, we had a completely planned city including parks and school sites. The city actually purchased the school sites in advance of the time when they were needed. The school sites were sold back to each of the school districts at cost.

Swent: That was a very advanced concept at that time, wasn't it?

Hickey: Very much so. We also had greenbelts that backed on to all of the major roads so that between the houses and the major highways, we had a strip park called a greenbelt. Same thing around the industrial area. It was an interesting community.

Swent: What was your job at that time?

Hickey: When the city incorporated, I was hired as the planning director. That was my first job out of college.

Swent: And what had you majored in?

Hickey: I majored in urban planning and landscape architecture.

Swent: There was such a major at that time?

Hickey: It was just the beginning of the major. At that time, you could get bachelor degrees but you couldn't get much in the way of advanced degrees, at least in Michigan. You can now, of course. You can get master's, doctorates, and post-doctorate degrees.

Swent: Urban planning was just beginning as an idea, then, wasn't it?

Hickey: Yes. As a matter of fact, one of the centers for curriculum development was in the San Francisco Bay Area at UC Berkeley. Of course, that was later in the '60s.

Swent: When did you get your degree?

Hickey: In 1952.

Swent: And then you worked at Oak Park for three years. Is that right?

Hickey: Yes.

Swent: It must have been very satisfying.

Hickey: It was. It was very satisfying and it seemed as if it was time to do bigger and better things.

Regional Planner, Clark County-Springfield, Ohio, 1955-1956

Swent: Then you moved to Ohio.

Hickey: Right, to a combined--county and city program, the Clark County Regional Planning Commission-Springfield, Ohio. It was identified as a regional planning program in that the city and the county had combined as a single agency to do planning for the area. It had a more agriculture bent to it, at least from the county's standpoint.

That was a very interesting experience in that one of the pioneers in the planning movement in this country was the consultant to that program, a man by the name of Ladislas Segoe. He was one of those legends that you have in every profession. It was very interesting to work with him for the period that I was with Clark County.

Ladislas Segoe, Legendary City Planner

Swent: What made him a legend?

Hickey: Ladislas Segoe was one of the earliest city planning consultants in the country. One of the stories they tell about him is that in the early 1930s he was invited to Chicago along with several other planners to discuss the formation of a professional organization for city planners. During the dinner the wife of one of the planners said to him, "I didn't know there were so many professional planners in the country." Looking around the room, he turned to her and said, "There aren't."

One of the things he was best known for was his presentation before the U.S. Supreme Court in 1927 on the question of whether or not local land use controls were in compliance with the provisions of the U.S. Constitution. A lawsuit had been filed that challenged the authority of a small Ohio community, the town of Euclid, to limit the development of a large subdivision to be located in the town. Segoe and a lawyer from Cincinnati, Alfred Bettman, appeared before the court and argued that local land use control, specifically zoning, was consistent with the provisions of the Constitution. A number of analysts credit them with moving the court to rule in favor of the Town of Euclid and against the Ambler Realty Company of Cleveland, Ohio. Based on that decision, local land use regulations spread across the country.

Swent: What did you learn from him? How did he influence you?

Hickey: One of the things I learned from him was that when it comes to making a planning decision you can never have too much information. No matter how much information and data we could complete between Segoe's visits to our office concerning a particular planning problem, he could always point out three or four pieces of information we had missed or not fully developed. Working with him was a real challenge.

Swent: He actually stayed there for a period?

Hickey: Well, he would come and visit every week. Actually, his offices were in Cincinnati and the reason he came to Springfield was that it was close enough that he could arrive on the train in the morning and go home in the afternoon.

Swent: Did you have to get involved in community action and political action as well? Or was it just technical planning?

Hickey: No, I was responsible for the community action, community involvement part of the program.

Swent: I see. So you had to explain it and convince people to approve it.

Hickey: Right, and meet with the citizens, with the city council, with the planning commission, the county board of supervisors and so on.

Swent: Were there organized groups?

Hickey: Oh, sure. Whenever you get a political agency, you have organized groups. You have organized groups who either want you to do something or want you to do nothing. There is always a wide variety of organized groups and interested individuals.

Swent: Were you trying to harmonize these groups?

Hickey: Well, not so much harmonizing but trying to explain the various programs and the ramifications of the programs, the interactions of the programs, that sort of thing, the relationship of the general plan which is the policy document to the implementing tools which are the zoning ordinance, the subdivision regulations.

Swent: What were the issues there? You said it was more agricultural.

Hickey: The issue there was the interface between the cities and the county. The city of Springfield was going through some rather difficult economic times at that point and development and expansion is always looked at as being the way to produce additional taxes, additional revenues and additional jobs. That was the issue at the time.

Swent: Growth.

Hickey: Growth, right.

Swent: Some things don't change much, do they?

Hickey: No, bigger is always considered better by the development interests.

Swent: Where is Clark County and Springfield?

Hickey: It's near Dayton, Ohio actually. It's between Dayton on the west and Columbus on the east. It's midway between those two larger cities.

Planning Director, Southfield Township, Michigan; Site of
Midwest's First Regional Shopping Center, 1956-1957

Swent: You were there not very long.

Hickey: No. Southfield, Michigan, a township located next to the city of Oak Park, was incorporating and they were looking for a planning director. Based on the work I had done in Oak Park I was invited to take on that job as the city incorporated. Unfortunately, the city's incorporation faltered a few times. The voters did not share the vision of the incorporation advocates. The city did incorporate eventually.

Swent: How could they hire you?

Hickey: Well, I was hired to work for the township. The township had a unique procedure where every aspect of the township budget was subject to review and approval by the public every year. Needless to say, when you're telling people what they can do or should do with their property, planning programs are not all that popular. But it was a very interesting area. The first regional shopping center in mid-America, the J.L. Hudson Center was a part of the Southfield development at that time. And working with the J.L. Hudson Company in the development of that center was an interesting program.

Swent: In what way?

Hickey: Well, it was a whole new idea of a shopping center which was going to serve the entire southern area of Detroit. It was going to be a major traffic generator. That concept, which is now taken for granted, was in those days a new thing that nobody had really considered before. There were one or two regional shopping centers on the East Coast but not in the middle of America. The J.L. Hudson Company pioneered it. But as I say, now you can find regional shopping centers in every corner of the country.

Swent: How did you feel about it?

Hickey: Well, I thought it was a wonderful idea. I mean, it seemed to make a lot of sense at the time. There were a tremendous number of technical problems connected with it. It's not that there was a lot of opposition to it. It's simply that you had problems that were new in terms of size and complexity for a shopping center.

Swent: Just because of the size.

Hickey: Because of the size and volume of business they anticipated.

Swent: Is it still there?

Hickey: Oh, it's still there. J.L. Hudson is gone but the shopping center is still there. Eventually they built three or four of them around the city of Detroit.

Swent: At that time, did counties or townships have to have planning committees?

Hickey: Well, they didn't have to have planning but in the postwar boom everybody wanted to make the world a better place. And the federal government had a program whereby you could get federal money to do planning. I think their idea was that if everybody had a plan and a program for development the economy would be in better shape because everyone would be working on public works projects and improvements. So, a lot of communities utilized federal planning grants to develop plans for their communities.

Swent: We're getting up now to 1957. This is still only twelve years after the war.

Hickey: Only twelve years.

Swent: Right. So the Southfield job didn't last very long.

Hickey: Well, the incorporation faltered. Eventually, the incorporation went through and I was invited to come back again but I did not return.

Swent: No.

Hickey: It was interesting, though. Every member of the planning commission in Southfield had a doctorate degree. I had design professionals from Chrysler, etc. I thought it was going to be the most successful planning commission ever created because everyone was so educated. Unfortunately, everyone in that group had a need to discuss all aspects of every program. We had some very, very long meetings.

Chief Planner, Tri-County Regional Planning Commission, Akron, Ohio, 1957-1958

Swent: You went from there to Akron. And this was a tri-county--

Hickey: The Akron program was the first multi-county planning program that had ever been tried in Ohio. Of the three counties, the center

county was Summit County. Akron, Ohio is located in Summit County. The wing counties were Medina and Portage. These three counties joined together to form the Tri-County Regional Planning Commission. The program was to develop a plan for the tri-county area working with all the cities and the three counties.

Swent: And the tri-county concept came before you came in, before you were hired?

Hickey: Yes, I was hired as a part of the first staff. I was the chief administrative planner for the program when it was formed.

Swent: But the idea of three counties cooperating had already--

Hickey: Originally the idea had to go through the state legislature. The legislature had to pass enabling legislation that would allow the three counties to set up the program and begin operations. The first job they undertook was to hire staff and I was the second person hired.

Swent: So you didn't have to get the concept started.

Hickey: Not the concept of the three counties, but the concept of the three counties working together to agree on a single plan.

Swent: That was something else again.

Hickey: That was something else again.

Swent: Was it hard?

Hickey: The main difference was that Akron being a major urban center having the most funding in the program felt they should have the most say. The wing counties were concerned obviously that they had the most land and they wanted to have equal say without having to pay equal cost. And so there was always a little bit of internal struggle within the organization. And the program itself, of course, was what the emphasis would be and how that would be implemented between and by the three counties.

Immediately to the north was the Cleveland metropolitan area so that you were not out in the middle of nowhere with Akron. Akron and Cleveland are in fairly close proximity. Those two regional agencies shared a common boundary where those counties touched each other.

Swent: At that time, as I recall, there were problems with pollution in Lake Erie.

Hickey: Cleveland was very successful in their metropolitan planning program. It was always called the Metropolitan Planning Commission as though there weren't any other metropolitan planning commission in the world. And they had a very successful Metropolitan park program. They called it the Emerald Necklace and it surrounded the city of Cleveland on three sides. In post World War II, Cleveland was still a booming area. The lake pollution and so on was yet to come.

Swent: Oh, that was later, then?

Hickey: That was later on.

Swent: But the planning was going forward.

Hickey: Planning was booming everywhere.

Swent: That sounds as if the three-county concept was a bit of a preview of what you came into later.

Hickey: Yes, that's true.

Director of Stark County Regional Planning Commission and Stark County Regional Transportation Study, Canton, Ohio, 1958-1964

Swent: But then you went to another regional planning program.

Hickey: Yes. The Stark County Regional Planning Program was Stark County, the cities of Alliance, Canton, and Massillon plus a large number of smaller towns were all partners in the program. The regional aspect was the combining of the cities with the county to develop a single planning program for the future. A transportation study and plan was part of the overall program.

Swent: Was this the first time that transportation has been part of a regional program?

Hickey: No, transportation studies were quite common in all of the larger metropolitan centers. They were just getting down to the smaller metropolitan areas. This was an initial program in Stark County but it was certainly not a new concept for the large metropolitan areas.

Swent: I guess. And that was just the first time that you had had a lot to do with transportation.

Hickey: This was the first time I was director for a transportation study. Previously I'd worked with them in various other programs, but had never served in the capacity as the study director.

Swent: This was simply analysis?

Hickey: Well, it was analysis and evaluation of highway capacities design, land use and so on. Planning for the future, coordination between the land use aspect and the transportation needs were involved. This was in the age before computers so that you had to do a lot of calculation that did not involve the computers, at least not at the local level.

Swent: That's right. It made a big difference.

Hickey: It certainly did.

Swent: It took hours and hours and hours to do it.

Hickey: They used to have the key sort system where you had all these cards with holes punched in them and when you wanted to find a piece of data, you pushed a series of pins like knitting needles through it and when you lifted the pins all the cards that fit that key sort of would lift up. The key sort system was a little primitive. In most planning programs, you're dealing with thousands of pieces of data. And the question always was how to handle them. So, when the computer came along, it seemed like the final solution had arrived. But in those days, at least in Stark County, that was pre-computer.

Swent: Punch cards.

Hickey: Punch cards. Well, you use consultants in the bigger cities. Cleveland and Columbus and so on could provide you with a computer. But of course, a computer in those days, filled two rooms, had to be air conditioned and dehumidified.

Swent: You had to sign up to do it at 2:30 in the morning or something of the sort.

Hickey: That's right. Everybody working there had on sweaters and overcoats to keep from freezing. Yes, those were the old image of the big spools spinning on the front of the file cabinet.

Swent: Well, it certainly changed in a hurry, didn't it? It's amazing to think how quickly--

Hickey: It's amazing how much you can get now. I mean, we have more capacity in our computer at home than we had even at ABAG [Association of Bay Area Governments].

Regional Planning Director, Association of Bay Area Governments, 1964-1970

Swent: So, speaking of ABAG, that was the next step we took in 1964.

Hickey: The ABAG program was one of those opportunities that come along once in a lifetime. I was attending a national planning conference and saw a notice that said, "How would you like to do the first plan for the nine San Francisco Bay Area counties?" Well, that's the sort of thing that's appealing. So I talked to the people at the conference, filed an application and eventually came out and did an interview and was offered the job.

Swent: Who interviewed you?

Hickey: Jack Kent from UC Berkeley. At that time, the University of California at Berkeley had one of the best planning programs in the country. That was another attraction for coming to the Bay Area. They had many of the luminaries in the profession on the faculty at that particular time. Jack Kent was very active. He had been a former city councilman in Berkeley and he was very active in the local politics as well as the planning school at Berkeley. So, he was on the interview committee along with a couple of city managers as I recall.

Swent: We should say what ABAG stands for. It's the Association of Bay Area Governments.

Hickey: At that time it was nine Bay Area counties and ninety-three cities. It included San Francisco, Oakland, Berkeley, San Jose.

Swent: Exciting new concept.

Hickey: Well, it was a real challenge. We were working at that time with a program called BATSC (Bay Area Transportation Study Commission). Dick Zettle, who had been with UC Berkeley Transportation Institute was heading the BATSC program and they were looking at the transportation needs of the Bay Area. This was after the BART [Bay Area Rapid Transit] study had been completed and BART was looking for money to build the system.

Swent: The BART is the Bay Area Rapid Transit.

Hickey: Yes. They were seeking funding. Well, actually, they had the funding but they were just beginning to start the construction of the BART system. And the BATSC was working on the highway needs. So, we at ABAG were the land-use arm of the program for the BATSC study and also, we were the home for the work that had been done for the BART system. We had their files and materials and were the depository for the work they had done. So our assignment was to develop a land use plan for nine Bay Area counties and working with the Bay Area Transportation Study Commission, to then implement that with a transportation plan.

BATSC eventually became MTC (Metropolitan Transportation Commission). BATSC was like the Bay Conservation Development Commission. It originally was created by the state as a study commission. But when it finished, its initial work was converted into a permanent agency called the Metropolitan Transportation Commission. So, MTC grew out of the BATSC program.

Swent: I see. You were hired as the director from the beginning. You were the regional planning director and you moved out here. Was there a family dislocation involved?

Hickey: Oh, yes. All five children, were not too happy.

Swent: And your wife.

Hickey: Yes. She was very enthusiastic about the move. She is very adventurous. When I had to report for work early she remained in Canton, sold the house, the car and moved the entire family to California.

Swent: From Ohio to California. And the office at that time was in the Claremont Hotel?

Hickey: The office was in the lower level of the Claremont Hotel. When I first came to work, I was sitting in a huge empty room except for a desk. There was nothing in the operation then except one desk and myself. Will Smith, who had been the city manager for San Rafael, was the Executive Director at the time. He left shortly after I arrived, as a matter of fact.

Swent: Was he upset that you were put in over him?

Hickey: Oh, I didn't come in over him. He was the executive director. I was the regional planning director. They had an executive director, always a former city manager. After Will Smith left, Warren Schmid, who was the City Manager for Milpitas, became the new executive director for ABAG. I was the regional planning director for a little over six years. And during that six-year

period, we had various regional planning committees composed of representatives from the cities and the counties. I had an advisory committee made up of all the planning directors in the Bay Area plus various consultants. We also had a big variety of committees of representatives from various interest groups around the Bay Area.

Swent: It sounds as if it could be a nightmare.

Hickey: Well, it went fairly well. In 1970, the Association of Bay Area Governments adopted the plan which had been prepared. And it was approved by all of the counties and ninety of the ninety-three cities. Three of the smaller cities balked at approving it. But other than that, it was adopted. So something must have been done right.

Swent: You could claim some credit for that, I'm sure.

Hickey: Well, if nothing else for lasting through the whole program.

Swent: Yes, you stayed through the whole process.

Hickey: Yes, I did. I submitted my resignation before they made their final vote on the plan and told them, "If you vote for it, I think that's wonderful. But if you don't vote for it, that's not the reason I'm leaving. I came here to do the job and I think the job has been completed." I had other things I wanted to do.

Swent: Does ABAG still exist?

Hickey: Oh, sure. ABAG exists. ABAG continues to function. They do all sort of things now. They fund projects and buy fire engines, etc. But for planning--they were at their peak during the late 1960s. They could have become the transportation planning agency for the Bay Area. But they chose not to.

Swent: Who is "they"?

Hickey: Well, the executive board of ABAG. Warren Schmid, who had been the director, left shortly before I did. And I had applied for the job. I thought it was time to move the association up a few notches and they chose a man who was a very quiet individual. He had been the city manager in Novato. They wanted a quiet personality. They got one.

Swent: Were you disappointed?

Hickey: Well, yes, in a way, but not really because, again, they had traditionally only hired city managers to be the Executive

Director. The city council people and the supervisors were used to professional administrators and they balked at hiring a planning director as executive director. They preferred city managers, county administrators, and so on. It was not a total surprise.

Director, Conservation, Development and Planning Department, Napa County, 1970-1990

Swent: So then you went to Napa County.

Hickey: The regional plan had a very city-centered philosophy to it which was to have the cities develop and agricultural areas retained, basically, in open space. And Napa County had just adopted an agricultural preserve concept, which they had put in place. It was at the time one section of the county's zoning ordinance. It seemed to me that if the regional plan for the Bay Area was ever going to amount to anything, it would happen in Napa County.

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Swent: This was 1970. I'm trying to get a sense of Napa at that point. The wine business was there but it was not anything like what it has become now.

Hickey: Well, at that time there were about fifty-five wineries. Now, there are about 265. We processed wineries in the Planning Department at the rate of one a month for ten years. There just didn't seem to be any end to it in terms of the number of wineries that could be built.

Swent: At that time, it was mostly just the old traditional ones.

Hickey: Yes.

Swent: And they weren't doing this kind of marketing with the restaurants and the tastings and all of the tourism.

Hickey: No. As a matter of fact, people would stop you on the street and say, "Where is there a good restaurant?" And you almost had to send them over to Sonoma County because there wasn't a good restaurant in Napa County. Now, every time you turn around, you fall over one. But in those days, there wasn't and the tourism industry as you know it today was not there.

But you know, grapes are a funny business. You buy corn flakes and you don't care where they're made. You buy bread; you don't want to go the bakery but you buy a bottle of wine and for some reason, people want to go the winery and see where the wine they buy is made. Basically crushing grapes and making wine is a processing operation, you could put in an industrial zone. But for the wine buyer it's got to be the quaint little building with all the mystique sitting in the middle of the vineyards. And of course, then the question is, if you keep filling up the vineyards with wineries, where are you going to grow the grapes? And so that was a--concern.

Swent: But you came in then, with the Conservation Development and Planning Department. Was this mandated by the state at that time to have these?

Hickey: One of the things we had to do at ABAG was to add up all of the nine Bay Area counties' planning proposals. And we had to add up all of the nine Bay Area county zoning plans. One regional plan option would obviously be, if we added everything we had already in place and we added up all of the zoning, we'd have a picture of what all the communities, the cities and the counties had proposed for the future. Well, it was a rather startling picture for some of the elected officials because the plans, when all added together didn't fit together. One county had done its plan one way and another county another way. And the same thing was true when you added up all the zoning. The interesting thing about the zoning was if you looked at the zoning in comparison to the general plans, you thought you had two different documents.

State law at that time required that you had to have a general plan before you could have zoning. But it didn't require that your zoning and your general plan had to relate to each other. So, consequently, people adopted a general plan which meant the legal requirement to have zoning had been met and then adopted zoning which was totally different from the general plan. Eventually the legislature said, if you're going to have zoning, it must be consistent with your general plan.

The General Plan: A Policy Backup, Not Just Put on the Shelf

Hickey: That started a whole new concept of planning because suddenly, the general plan became more than just a document to prepare and put on the shelf. It became a document that really was the policy document that provided the basis for zoning and subdivision regulations. And the law was amended to provide that if you're

going to have a subdivision, it must be consistent with the general plan. That became a required finding in approving subdivisions or commercial developments. You had to make that consistency finding. That was before all the environmental documentation.

Swent: Do you happen to know what the name of this law was or when it came?

Hickey: It's the state planning enabling legislation. Government Code Section 65000 et seq. recodified in 1953.

In 1955, the plan for Napa County provided you could subdivide most of the county into one acre lots; the plan had been predicated on the concept that looked as if Napa County was going to be the San Jose of the north. San Jose would anchor the south end of the bay and Napa would anchor the north end of the bay. It was a traditional plan except for the concept of the Agricultural Preserve (AP), which had been adopted in late 1968. And what the AP basically said was that agriculture was "the highest and best use of the land in the Napa Valley." The minimum parcel size was set at twenty acres.

The Agricultural Preserve: Highest and Best Land Use

Hickey: That was an unheard-of change in those days because it indicated to the development community that agriculture is the long term use, not simply that agriculture is a holding action until somebody comes along with a shopping center or subdivision. It was challenged in court, and it was sustained in the courts. It's been in effect in this county, since 1968. There's never been one acre subtracted from the preserves. However, there have been a lot of acres added to it. And of course, the whole concept of the general plan is another story.

Swent: Do you mind telling about it?

Hickey: Well, the concept of the general plan was how to take the agricultural preserve idea and expand it into the totality of the general plan. We were never able to get to the point where we had the Board of Supervisors and the planning commission in agreement on the general plan that was developed. So, finally, we decided that we would put the question of the general plan format to the voters.

We drafted a plan proposal with four different scenarios. One was that there would be future growth to bring the population in the county to some 350,000 people by the 1990s. The second was a lesser forecast. And the third proposal was to have a growth not to exceed 100,000 people. And the fourth was none of the above.

The multi-choice plan concept report was sent to all the registered voters in the county. They were asked to "Send in your feeling." The results were overwhelmingly in favor of 100,000 population or less. The Board of Supervisors proceeded to establish a plan for the county that was based on the city-centered concept: that new development would take place in the cities, not in the unincorporated area.

One of the county's policies was that they would not approve package water and sewer plants. Consequently, you couldn't have a subdivision because you need a city water and sewer connection. The concept of city water and sewer, as far as the county was concerned, was that if you needed city water and city sewer, you also needed city fire and police protection. In other words you needed to be in the city. And so that basically is the reason you don't see large residential subdivisions and shopping centers in the unincorporated part of the county. You also don't see a lot of signs and advertising. There are none of that strip type of commercial that's so common in almost all of the rest of the San Francisco metropolitan area.

Rezoning for Consistency with the General Plan, 1975

Swent: And was this done after the general plan was completed?

Hickey: Yes. When the plan was adopted we went into rezoning for consistency. Now, keep in mind that the last time the county had initiated a major rezoning program was 1955. And this was 1975.

Swent: About twenty years later.

Hickey: Yes, the public's general feeling after twenty years was that there was never going to be a change in zoning in Napa County. When zoning policies were established in 1955, it was almost on a, "What zoning would you like to have on your property? You want commercial? That's okay." This was the first time that the concept of what the county thought was the best plan for the future had come into being. And the program was to rezone your

property and not necessarily for what you had in mind for the future but what the county had in mind.

Measure A To Limit Residential Growth, 1980

Swent: There must have been some sticky proposals and situations.

Hickey: Yes, we had some very long hearings on that particular program. And there was another action then. The citizens in the county decided that they were not going to depend totally on the elected officials. In 1980, they adopted a measure, called Measure A, which provided that the population in Napa County would never grow at a rate that would exceed the state's, the nation's, the region's rate. At that time this was just a little over about one percent per year. Napa County adopted that same percentage. Of course, one percent of growth in Napa County compared to one percent of growth in the state and the region or the nation is substantially different in terms of numbers.

The measure passed by a large majority. Almost every precinct in the county voted for it. And it survived the court tests that followed. Implementation of the program was that it had to be made a part of the county's general plan and that the concept itself would be implemented through the county's residential building permit system using federal census data. Each year following its adoption the county could issue only 133 residential building permits.

Swent: For the whole county?

Hickey: For the whole county. Not including the cities because we didn't have jurisdiction in the cities. Measure A will expire in the year 2000 if it is not extended. There was the county with its program and the citizens had their own program. In 1990 they passed Measure J.

Measure J to Require a Vote for Agricultural Rezoning, 1990

Swent: What is Measure J?

Hickey: Measure J says that the board of supervisors in Napa County cannot rezone any piece of property in the unincorporated area that carries an agricultural designation without a vote of the public.

That means that the board can't change agriculturally designated lands to commercial or residential or industrial without putting it on the ballot and having the people vote in favor of it. So we've had a whole series of programs that had implemented the concept of preserving agriculture and open space lands.

Swent: You started out as director of the Conservation, Development, and Planning Department. You were there for a long time.

Hickey: Nineteen years.

Swent: Nineteen years. And during that time, all of this was going on. You were hired by the county; you were accountable to the supervisors?

Hickey: Yes.

Swent: Who changed.

Hickey: Yes. [laughter]

Swent: You were nineteen years in a job with bosses who changed every--

Hickey: Once every four years.

Swent: Every four. All of them changed?

Hickey: Well, yes, on a rotating basis--one year two supervisors are elected and the next year three supervisors are elected. I mean, it's a two-three change over that runs through the four-year cycle.

Swent: Five supervisors.

Hickey: Yes.

Swent: Did any of them last the whole time?

Hickey: No. [laughter] Well, in the early days in the county, we had one planning commissioner who lasted thirty-six years. He had been on the planning commission thirty-six years and had been chairman for sixteen years. We had other planning commissioners for sixteen years. And as you get into the eighties it became a four-year terms. Today planning commissioners change at almost the same rate as the supervisors change.

Swent: Where does the planning commission fit into this? The supervisors obviously are elected directly by the people. Then they appoint a planning commission.

Hickey: They appoint a planning commission to serve as an advisory body. Historically, when you're bringing in a new program, one of the selling points has been that you establish a citizen's commission to advise you, parks and recreation commission, and planning commissions, etc. The planning commission is advisory in that it doesn't have any legislative power. The elected official is the only one with the legislative power. The planning commission reviews land use and development proposals and make their recommendations to the elected officials.

Swent: So you would present your ideas to the planning commission.

Hickey: Right, to the planning commission and then present the planning commission's proposals to the board of supervisors.

Swent: You presented that. I see.

Executive Officer for the Local Agency Formation Commission

Hickey: And at the same time, I was also serving as the executive officer for the local agency formation commission.

Swent: Yes, what is that?

Hickey: Well, in California, there's a provision in the law that says every county must have a local agency formation commission. What happens is you get cities that are running down railroad tracks and highways to annex a piece of property located some distance from the city limits. They were called cherry-stem annexation. The state legislature said that this is a poor way for our state to be developing and therefore they created the local agency formation commission. The local agency formation commission is quasi-judicial. If you want to annex a piece of property, you have to get the approval of the local agency formation commission.

The local agency formation commission is made up of two city members and two county board-of-supervisor members: two elected city officials, two elected county officials. Four of them appoint one citizen member; it's a five member commission. And they have the final decision-making authority concerning annexations. You can't appeal their decision to the city council or the board of supervisors. If you don't like LAFCO's decision, you have to take them to court because there's no appeal.

LAFCO has a tremendous amount of authority in that they also decide where water and sewer districts may expand. You can't

expand a water district or a sewer district in California without an approval by LAFCO. If you can't get water and sewer into an area, you're not going to get it developed. LAFCO has a tremendous amount of latent authority. Some LAFCOs are very active; some LAFCOs are nearly invisible.

Swent: As executive officer, what did you do?

Hickey: I was responsible for all of the staff work and all of the studies made on the various annexation proposals that came in, and to make the presentations to the commission.

Swent: You were doing that at the same time that you were with the--

Hickey: Right, same time. The board of supervisors decided that to maximize the impact of the planning program, so they created a combined program. They took the planning department which was a separate department. They took the building inspection department which was a separate department. The local agency formation commission, which had been a separate program, and they put them all together in what they called the conservation development and planning department. The development part was the building inspection. So I held those titles at the same time.

County Zoning Administrator

Swent: You were also a zoning administrator.

Hickey: Yes. That was a program that was created in 1980 with the provision that I would be the zoning administrator and have the responsibility for running the program. The zoning administrator is kind of a relief program that's popular because instead of having the whole planning commission meet, the county decides certain programs that can be administered through the zoning administrator. The zoning administrator holds hearings as an individual. In other words, you go through the same procedure. Instead of having to call the whole commission, the zoning administrator would handle the more routine thing.

Swent: My, it sounds like a very complicated job.

Hickey: Well, it sounds complicated but it all fit together.

Swent: Well, yes, I can see it fit together but you were dealing with a lot of constituencies, weren't you?

Hickey: Yes. That's for certain.

Swent: Lots and lots of different people and ideas. I read a little bit about a Silverado shopping center that was proposed at one point.

Hickey: Silverado Country Club--had a hotel and their development plan included a shopping center.

The Silverado Country Club Development

Swent: That all came in during your term of office?

Hickey: Yes. We did a lot of negotiation with Silverado. As a matter of fact, as a result of our negotiations, the shopping center was eliminated; simply because, I suppose, from their standpoint the economics and from our standpoint that it would have had a tremendous impact on the infrastructure of the area. I think they found residential development more profitable and so their shopping center concept was dropped. It's now a housing development and was one of the last pieces they built at Silverado. The hotel itself, which was a multi-level hotel, never materialized.

Swent: But the whole resort came in during the time that you were here?

Hickey: Well, the whole resort came in and negotiated city water and sewer, the only thing that made Silverado possible. When the county created the agricultural preserve, they kind of said, "We're going to relax the standards in the hillsides because we have made the valley floor agriculture." So in that period, Silverado came along with the big development plan and had the whole thing approved. They built it out about six, or eight years ago.

Swent: Oh, really.

Hickey: It was very extensive--Meadowood was another of those concepts. The property where Auberge du Soleil is located. There were three of those projects that came in at about that time.

Swent: Silverado, Meadowood, and Auberge du Soleil.

Hickey: Auberge du Soleil was a part of a large tract subdivision that covered the whole hillside area. The development included a winery and a restaurant. The restaurant eventually became Auberge. The winery is the Rutherford--Hill Winery. But the

subdivision eventually was dropped. I think there are six home sites instead of twenty or thirty originally planned. People today say, how did that development ever get approval to locate up there? Well, that's how it happened.

Swent: They were there. They were grandfathered?

Hickey: No. They came in during a period when the county felt that since development was going to be restricted on the valley floor, development had to be allowed in the hillsides. Eventually, that concept was changed when the county recognized that you can't separate the floor of the valley from the hillsides. If you're going to have agriculture in the floor of the valley, you can't have development in the hillsides. Today ninety-five percent of the county is zoned for agriculture.

Swent: And this twenty-acre minimum parcel size holds?

Hickey: The twenty-acre limit is now forty acres. And the limit in the hillside areas is now 160 acres so in the past twenty years the county has not decreased but rather increased the minimum parcel size. Last year they approved for 160 acres in the hillside area.

Swent: What size are the lots at Silverado?

Hickey: That subdivision operates under a planned community development plan. In the 1960s there were planned development areas in the county. Planned development areas provided for a development like Silverado. And Silverado negotiated water and sewer service from the city of Napa so they could build higher residential densities.

Swent: I see. So they were kind of an exception.

Hickey: They went through the door before that door closed.

Swent: But it's closed now.

Hickey: Yes.

Swent: Is there anything more you should say about that?

Hickey: No, I retired from the county in 1990 after twenty years and I'm basically a planning consultant now.

Swent: Do you live in Napa?

Hickey: Yes.

Swent: Where did you live when you first came out here?

Hickey: I lived in Danville, California. Nice small community.

Swent: Commuted in from Danville?

Hickey: From Danville to Berkeley before Napa. In those days it wasn't a bad commute.

Swent: No.

Hickey: That was before the freeways. I mean, there was no freeway going to Danville in those days. There was a two-lane highway from Walnut Creek to Danville.

Swent: It was still orchards and--

Hickey: Still orchards. It was a nice place to raise a family.

Swent: It has certainly changed.

Hickey: Yes, it certainly has. We had lunch there yesterday and you hardly would recognize Danville anymore. In the 1960s it had a population of 1,500 people. Now, it must have 20,000. Isn't that amazing, the change. Except for a few buildings, you wouldn't know it was the same place.

Swent: No, as a planner, you must really kind of shudder at some of those things out there.

Hickey: Well, it depends. If you're into urban planning it's a good thing. If you're into the other side of the planning, it can be a problem.

Swent: I don't know whether that growth out there was planned or not.

Hickey: Well, in Contra Costa County, the only plan they had was to get bigger and bigger. Solano County has that philosophy. When everybody else complains that the population forecasts are too high, Solano and Contra Costa County complain they're too low. They used to have a big party whenever a county hit the million people mark. I remember when Alameda County reached a million population, they had a big celebration. I mean, wow, we've got a million people! Isn't that wonderful! They don't celebrate that any more.

Regional Administrator, Geothermal Resources Impact Projections
Study, Lake, Napa, Sonoma Counties

Swent: Also during this same period, you became the administrator for the geothermal resources impact project study known as GRIPS. All these acronyms. PG&E was the first. Were they the ones that started the geothermal program?

Hickey: Yes, PG&E was looking at a program to coordinate with the counties which had the geothermal resource available. We had the geysers and the mud baths and the hot water, all in the Calistoga area. Lake County had active geothermal resources in the Cobb Mountain area. And Sonoma County, of course, had it, and Mendocino County.

PG&E was looking at a program to bring all of these interests together so they could talk at one time about developing the geothermal resource for generating electricity. In order to do that, you have to have about eight or ten geothermal wells. You hook them together and you run pipes over the landscape till you get them to a power plant. Sometimes you had the wells in one county and the power plant in another county. So it took a multi-county or cross-county kind of a pollination to make the thing bloom. The GRIPS program was targeted to bring the counties together to do certain environmental impact studies and certain analysis for future development of the geothermal resource.

Swent: Had the environmental impact study become a requirement?

Hickey: In 1978. Yes, that was just the beginning of the EIR requirements. It was present at the time but it was not a major factor.

Swent: What was your role?

Hickey: Someone had to be responsible for running the program in the sense of coordinating all the activities, the meetings and all the administrative details connected with the program. Napa County agreed to serve in that capacity and I was designated by the county to serve as the interim administrator. The idea was that the program would eventually be up and running, would be a full-time program with a full-time administrator. But somewhere in the process, it hit a rock and sank. The program never really materialized into a full-time program although it was helpful for--

Swent: You mean the study?

Hickey: Yes, the study was completed but there was no ongoing GRIPS program. The program concluded with the study. It's like BCDC or the BATS program. After the study was done, there was supposed to be the ongoing implementing agency. Only with GRIPS it never happened.

Swent: Well, they did develop the geothermal process.

Hickey: The geothermal, yes. It's interesting that they are now undeveloping it because the resource that was supposed to last forever has begun to slow down in terms of energy production and they have been closing some of their plants.

Swent: Have they?

Hickey: Yes, that was on the news the other day. Maybe if they had kept GRIPS they might have solved it. But I don't think so. They were injecting the water back into the ground under the assumption it would circulate back into the magma, be reheated and come back as steam. Maybe they drowned the magma.

Swent: It wasn't only PG&E as I recall. There were other--

Hickey: There were a whole bunch of companies. In the days of the energy shortage, there were many companies, not just PG&E. PG&E bought the power but there were private companies who were developing the geothermal resource.

Swent: And they had to get permits from each county.

Hickey: Yes. And again, you had that crossing-the-county boundary situation where one county would get the revenues from the generating plant and the other county would get the wells and the silver covered pipes running across the landscape.

Celebrating the Anniversary of the Napa County Agricultural Preserve ##

Swent: You were saying that you're doing a little historical preservation of your own with the agricultural preserve.

Hickey: Yes, we're doing a twenty-fifth anniversary celebration of the creation of the Napa County agricultural preserve. It's a three part program. The first part will be an afternoon symposium and there are five speakers, one from the vintners, one from the growers, myself representing the land trust, and we have James

Conway, who wrote the book Napa as one of the speakers, and Larry Orman, who is with the Greenbelt Alliance. The reason for the five afternoon speakers is that their comments about the future will be coupled with a written history of the agricultural preserve.

The prime reason for this whole get-together, in addition to honoring the five remaining members of the original twelve member group that approved it, is to create a written history of the preserve. Nobody ever sat down and wrote how it came about. It was the most significant decision in this county because it changed forever the future of the county from another part of the urban fabric into something that's a different where agriculture is the highest and the best land use, not simply a holding action for urban development.

The second part of the program is we're going to start a tree planting program. It will be in honor of the Ag Preserve. And the first tree will be planted at the event which is going to be held at the Yountville Community Center. Then following that, there will be a dinner and the dinner will be to recognize and commend the three remaining members of the board of supervisors and two members of the planning commission for their action and foresight.

Swent: When are you doing this, Jim?

Hickey: The twenty-third of September in the Yountville Community Center.

Swent: Are you encouraging people to come?

Hickey: Oh, sure.

Swent: I'd love to come.

Hickey: We have a limited capacity. The land trust is handling all of the ticket reservations and the symposium will be at no cost. The maximum capacity of the hall is about 300 people. And the maximum capacity for the hall for the dinner is 200 people. So, if you're interested, mention it to one of the women before you leave because it's a good idea to get a reservation.

Swent: More demand than you can handle, I would think.

Hickey: I would think so. I mean, we didn't want to go into, you know, a football stadium or something because it loses the character of it. And besides, a number of the hearings on the creation of the Ag Preserve were held in Yountville and so the decision was to keep it in the community.

Swent: It should be wonderful.

Hickey: Yes, and it will produce a written history of the creation of the preserve. If you're twenty-four years old today you don't generally know what the Ag Preserve is all about because you weren't here when it was created twenty-five years ago.

Swent: They will think it was always this way.

Hickey: Part of the reason for writing the history is to provide copies of the publication to the schools. We want to run it through the schools, through the libraries and so on so it's a part of their heritage that's important. And as I said, nobody really ever wrote it down. You would imagine they had until you start looking for it. And when you start looking for it, you find it isn't there. The Napa Valley Museum has taken on the job of doing the research and the history writing. There's a grant of \$6,000 to put it together.

Swent: Good. It's a small grant but it will do it. That's good.

Hickey: Well, it will give us a small publication and from that we can add to it. At least it will be a beginning.

Homestake Requests a Permit for Exploratory Drilling, 1978

Swent: Wonderful. Now let's get back to 1978 when Homestake came in but you, perhaps, were not aware of it at that moment. Do you recall when you first got involved with this?

Hickey: Oh, yes. We had a request from Homestake to do some exploratory drilling. What they were doing at the time is they were drilling holes in a grid pattern over the entire site that they were proposing to mine. The purpose was to determine the gold content of the area. They were drilling holes to various depths. But in order to do the drilling, they had to get a permit from the county. Basically, it was almost an administrative action which was to allow them to map out the gold field in the sense of knowing where the ore was, or whether it was economically feasible to proceed.

Swent: That was the spring, I think, of 1978.

Hickey: Yes. They told us that they had researched in Sacramento the old mercury mine files, and that they had discovered that there was gold in microscopic quantities listed in some of the old reports

from the mercury mines. Consequently, they were looking at a particular mine and they wanted to simply drill holes to see if there was any commercial value.

Swent: Is this the Manhattan Mine?

Hickey: Yes.

Swent: They also went to one called Cherry Hill at Wilbur Springs.

Hickey: I think this was the Manhattan one.

Swent: Is Wilbur Springs in Napa County?

Hickey: Yes, there's a place called Wilbur Springs. I understood, through leases and options and so on, they controlled ten square miles of land or something around that size. But they simply were drilling in a grid and the size of the grid was to determine how big the potential ore body was. That was our initial introduction to it. It was a rather routine administrative proposal. "We're doing a little preliminary research" was their initial claim.

Swent: Had anybody come in previously looking for gold?

Hickey: No, because the mercury mines were there. The mercury mines had been very big in World War I. They used the mercury for munitions and so on and of course, they'd been big when they were originally operating. However, that whole area was pretty much abandoned. It was never looked at to my knowledge as a gold mine. The value of mercury had been so depressed that it wasn't really considered a mining area as much as it was considered a problem area because of the seepage from some of those old mines and the prospect of contamination from that seepage.

Swent: Actually, the area where the McLaughlin is, is sort of over the hill from the Napa Valley anyway. It really isn't in the valley, is it?

Hickey: Well, it isn't in the Napa Valley but it's in the Lake Berryessa water shed. Although we don't get any of the water out of Lake Berryessa, mining could have been a problem in terms of the potential pollution of the water for Solano County.

Swent: So that was your first contact, was just this initial drilling permit. And then, I think it was in August of 1978 that they announced that they had really found something.

The D'Apollonia Engineering Environmental Analysis

Hickey: Yes, I think they began serious discussions about the prospect of putting a gold mine in the area. That's when they got involved with D'Apollonia Engineering who did the encyclopedic environmental analysis. I understand they had people walking at arms length from each other over the entire site to check out all the plant materials. And the final report was published in three huge volumes.

It's the most detailed environmental analysis I have ever seen. That took them some time to put the EIR together. The concept with the analysis was that there was no need to send somebody out to check it. They would give you all the data you needed. There was no need for the local communities to hire consultants. And so you got this huge pile of paper from D'Apollonia. And there were meetings about it off and on as the thing was put together.

Swent: Was this a questionable concept?

Hickey: Oh, it was questionable in the sense that, you know, the fox and the chicken coop sort of a thing. Here they are doing the analysis but on the other hand, due to the volume of work to be done it's my recollection that there was some discussion about the best engineer to do the job. It was never a question of whether they were going to hire them and pay them but whether anybody had any objections to that particular company. I don't recall anybody having any objections per se. And the feeling was, when it's all done, if you look at it, you think something's missing, you can always request it anyway. So, yes, it was a little different.

In those days, you didn't have the applicant doing the analysis. You always had the applicant paying the community or the county and they hired a consultant and the consultant did the work.

Swent: Is that the way it's usually done now?

Hickey: No, not so much any more because what happened is when you do that, you assume the administrative responsible for the environmental studies. So, you have your staff doing all of the administrative work. You're doing the quality check. You're doing the bookkeeping, etc. For example, in our county, we have a list now of qualified consultants. If you need an environmental impact report, you hire one of those consultants. The consultant works directly for the applicant. Then the consultant files his proposal and it's reviewed by the county. If the county thinks

it's adequate, then they go ahead with the EIR. The county becomes the quality control agency but they no longer get involved in the administration work of writing proposals, hiring consultants, writing contracts, administering the program, making final approvals, etc. All that work was taking up a tremendous amount of staff time.

Swent: Of course, in '78, this was all a rather new procedure, wasn't it?

Hickey: It was a rather new procedure, but when you're talking about a gold mine that's going to be a mile long, 2,000 feet across and 500 feet deep involving three counties, where you've got the water in one county, the gold in one county, and the crushing and the processing in another county, you're talking about some rather major impacts on an area spread over three counties. The proposal was a bigger physical project, I think, than had ever been proposed in this part of the country.

Swent: Were you aware of that at the beginning?

Hickey: We understood the three counties. We weren't totally aware of the magnitude of the program because you think of a gold mine as a single mine shaft. As it developed this was going to be open pit. And then as it developed, all the water supply would be coming out of Yolo County. Then there was the five-mile slurry pipeline to Lake County and the fact that all of the processing would be done in Lake County and all of the cyanide and all of the refining residue would be located in Lake County. All of the rock overburden would be dumped in Napa County because they were crushing in Napa County. And at seven tons to an ounce of gold, you're going to move a lot of rock.

Those were some of the statistical concerns and they're talking about running the mine for fifty years. It looked as if you make a mistake in the beginning and you project it out fifty years, it would be a major mistake. So there was a lot of concern that if you're going to do it, let's do it right. I don't think anybody at the government level in any of the three counties were opposed to it. They were concerned about the size and the impact of it, the potential impact of it.

Swent: So, they had to get this initial drilling permit and then they had this D'Apollonia report which, as you say, was a massive, very impressive document. And then on the basis of that, they did the environmental impact report.

Hickey: They had to file for their applications. They had to get a variety of permits. In Yolo County they were asking for a rezoning to build a dam and create a reservoir and to do some

mining. In Napa County they were asking for permission to do some mining, to build the processing facilities, and to improve some roads in Lake County. In each county the applications dealt with the same project but they were totally different because the program was totally different in each county.

Meeting the Requirements of the Surface Mine and Reclamation Act

Swent: There was something--in Napa County, you had to pass some special --there had to be some legislation that you had not yet done, the SMARA [Surface Mine and Reclamation Act].

Hickey: Yes. We had to establish the regulations and requirements for SMARA in order to--

Swent: SMARA had just been passed not too long before. And you obviously hadn't felt that you needed--

Hickey: We didn't have anything of any magnitude dealing with mining. So, that's true. We had to come up to speed on SMARA if we were going to at all consider approving the gold mine because obviously the reclamation aspect of it with a project of that size was critical.

Swent: And that was particularly in Napa County, I guess, wasn't it?

Hickey: Yes, 80 percent of the ore we were told was located in Napa County. Twenty percent was in Yolo. But the magnitude of the hole that was going to be left and the question of what would happen to it was of concern to Napa County.

Swent: So, your first step, I guess, was to get this SMARA.

Hickey: Well, the first step was to have them file an application as to what it is they wanted because, you know, the process of a use permit is the owner tells the governmental agency, in this case the county, what they want to do. We don't tell them what they can do. They tell us what they want to do and we tell them how to do it, if you can do it. But they have to define the project. If I recall, they came in and we gave them a permit to mine six or eight railroad carloads of the ore and they shipped it to Canada. In Canada, they processed the ore in various ways to see if it was economically feasible to even consider processing the ore.

Eventually, they decided that it was feasible and that they had a method whereby using retorts in the heating, they could actually make a profit on one ounce in seven tons of ore. That

was really the green light [for the] project. Then came filing the permits of the various agencies. It wasn't only the counties. They also had a large number of state and federal agencies to deal with.

Swent: BLM [Bureau of Land Management].

Hickey: BLM. The program then became one of procedure. Who came first? Which of these agencies do you have to clear to get to this agency to get to that agency and so forth and so on?

Logistically, it wasn't a nightmare but it was a very interesting program in that there were so many players and there were so many permits involved. Some permits couldn't issue until after other permits had issued. You couldn't issue the reclamation permit if you didn't have the use permit for it. But if you were going to issue the use permit, you had to know what was going on in the reclamation permit because it had to be a condition of approval. And there was no sense in our approving a gold mine in our county if the water supply in Yolo County wasn't going to be approved and if the processing plant in Lake County wasn't going to be approved. So it was a question of coordination. And the coordination issue really was the reason for the creation of EDAC [Environmental Data Advisory Committee].

Procedural Coordination Leads to Environmental Data Advisory Committee (EDAC)

Swent: Was this something that was sort of standard in other places or was this an innovation here?

Hickey: No, one of the concerns was who's going to be the lead agency. Under the environmental law, you have to have a designated lead agency which means one county has to be the lead agency. You can't have five lead agencies. So, for this project, who was the lead agency going to be? The question became how do we decide who's going to be the lead agency.

Swent: And who decides?

Hickey: That was the reason for EDAC. We put the committee together because each of the three counties recognized the problem but nobody saw the solution.

Swent: That's what I'd really like to get at. I cannot figure out how this came to be. I know it came to be but I can't figure out how.

It had three different counties. Somebody must have made a phone call to somebody.

Hickey: In the past we had worked with Solano County in the Lake Berryessa area. We had worked with Sonoma County and Lake County in connection with GRIPS.

Swent: Now, when you say "we", you mean your planning--

Hickey: I mean the county board of supervisors, the Planning Commission and county staff. I think the GRIPS program showed that we could work together successfully to accomplish a common objective. So the suggestion was made, let's create a group that involves a representative of each board of supervisors, a planning commissioner from each of the counties and we'll throw in the planning directors to do the work.

We had the planning commissions involved and this way, you shortened all the communication links and you had supervisors involved and we rotated the meetings so that everyone didn't always have to come to Napa although most of them were held in Napa. That way you had the planning advisory body, the legislative body, and the staff people all sitting down and discussing each of the problem areas. Instead of having three meetings in each county times three, we could do it with one meeting.

Swent: Well, it makes great sense but I just wondered how it came about that--there must have been a person who took the initiative.

Hickey: It just seemed it was a natural thing to do. We called the first meeting in Napa County. We had done the GRIPS program and it seemed--let's do it again. We invited representatives from Lake and from Yolo counties.

Swent: Perhaps this was--were you sort of the catalyst for this?

Hickey: I was the person assigned the responsibility to call the group together.

Swent: And when did Ray Krauss come into the picture?

Hickey: Ray Krauss was around from the time D'Apollonia started their survey.

Swent: And you already knew Ray?

Hickey: I knew Ray from Sonoma County. He had been in the planning department and I knew him from various planning meetings that we both attended.

Swent: That undoubtedly helped.

Hickey: That helped, yes. It seemed like a tremendous job that he had. Everybody else involved were engineers and technicians and here they had managed to hire this guy who was just a county planner. I thought he had a tremendous job to do and I think he did a tremendous job. At the time when everything was beginning and new it seemed like a great idea to hire somebody from a county staff who knew county regulations. Sonoma County wasn't directly involved in the project but it was in this part of the world. As I recall, Ray had also been working with a consulting firm.

Swent: Do you recall when your first EDAC--well, it wasn't EDAC yet, but when you had this first meeting that evolved into EDAC?

Hickey: The initial meetings were simply to see if we could agree. The memorandum of understanding was completed in September of '78. When the memorandum of agreements were finally signed, the title had changed to memorandums of understanding (MOUs). We had it drafted and it circulated and then it circulated again and then it circulated again until all the significant issues were resolved.

Swent: Why so many circulations? What were the projects?

Hickey: Well, somebody thought they should have maybe two supervisors from Napa County because after all we were going to do most of the work. Somebody said, "Well, you know, we think we should have more representation from Yolo County or more from Lake County because we're going to have more of the problems in Lake County." And you get into those sorts of things. And it takes some telephone calls and some working back and forth. But eventually, it was agreed that regardless of what your role in the program was that you would each have one supervisor and one commissioner.

Swent: So, it was one supervisor, one planning commissioner, one planner, and one staff person.

Hickey: Basically, it was the three planning directors. The planning director for Lake County. John Thayer assigned Alex Hines of his staff to represent Lake County. Alex was the one who really did the work for Lake County and he did an excellent job.

Swent: EDAC would change with the supervisors wouldn't it? Who were the people that were on the first one?

Hickey: Oh, I'd have to look that one up. I can't remember who. Harold Moscowite, I know, at one time represented Napa County because the gold mine site was in his district. But I can't remember whether he was the only Napa County supervisor to serve on EDAC. I'm not sure.

Swent: Jay Corley.

Hickey: Jay Corley was chairman of the planning commission at the time.

Swent: Was he on EDAC?

Hickey: I think Jay was on EDAC. It could have been Jay or Stretch Lewis. Robert Lewis was the planning commissioner who was a retired airline pilot and he was interested in it so he probably spent some time on the program.

Swent: But you were the director of it for the whole time.

Hickey: Yes, I was responsible for running the EDAC program.

Swent: Starting from September of '78.

Hickey: Right. When the memorandum of understanding was put together and then the program itself, the project began to take shape. So, consequently our processing could be initiated in response to their proposal and consultants were hired to do the environmental impact report. The scale or scope of the environmental impact report had to be determined and that was worked out. Then a firm, Engineering Science, out of Berkeley was hired to actually prepare the report. They worked jointly with a company called Mundy & Associates who did the socio-economic impact report. Then there was another firm who did the geologic report--the name of that firm I don't recall off hand.

Swent: Is there a decision to make on whether there is an environmental impact report or an environmental impact statement?

Hickey: Well, there are CEQA and NEPA. CEQA is the California Environmental Quality Act. NEPA is the National Environmental Protection Act. Under CEQA you do an EIR. Under NEPA, you do an EIS.

Swent: Okay, all right. So you had to do both.

Hickey: Yes, because of BLM and some other federal agencies we had to do both. The EIR was prepared to meet the CEQA standards and the EIS was prepared to meet the NEPA standards. And the NEPA program was

primarily channeled through BLM. Although they were prepared jointly, they were processed differently.

Coordinating the Requirements of the California Environmental Quality Act Program

Swent: And you had to do all of that administration?

Hickey: Well, we had to coordinate the processing of the CEQA program. In each of the counties, the way the program worked, each of the counties received the draft environmental impact report. And there were over 200 mitigation measures in that report. Some of them were remedial. Some of them were monitoring. Some of them were corrective actions that would be taken. But each county had to look at its own particular part of the program and its part of the EIR because obviously one county could not speak for all three counties. We were the designated lead agency. We let the contract for the work and we did the staff response for the program working with the other two counties.

Swent: For the work on the environmental impact report or statement.

Hickey: Primarily the EIR. The environmental impact report then went to each of the three counties. Again, there was an approved program of how to proceed in, I think, either March or April. In March we held the first hearing on the EIR and then the hearing went to Yolo County. They held two hearings in April and then Lake County held a hearing. It was June before all the hearings on the environmental impact report were finished.

Swent: But years went by. I mean, you're talking about your first meeting. Your MOUs were in the fall of '78 but the EIR and EIS were not certified until '83.

Hickey: Right.

Swent: And Yolo finally accepted it in April of '84. So, this was--

Hickey: Yolo was by far the most critical of the project. They were the most reluctant. They were the most reserved about proceeding.

Citizens of Yolo County Concerned about Air Quality

Swent: They had the most vociferous opponents, too.

Hickey: Well, the Rumsey people were concerned that it was going to completely destroy their farm way of living. They were downwind of the mine site and believed they would get airborne asbestos fibers from the project. The critical issue became the asbestos fibers and we got into one of those, "This expert says that the asbestos would be totally dangerous to your health." Homestake's expert says, "No, these are the short-strand asbestos and you can have a million short-strand asbestos and it won't harm you. It's the long strand that you have to worry about." And the Rumsey people said, "Every time you drive a truck and every time you do a little blasting, and every time you do the crushing, we're going to have all this asbestos in the air and we're going to all be exposed to lung disease." And the whole debate sort of came down to that one question.

There were various experts. Homestake had experts and Rumsey had experts and even UC Davis got involved. And the Davis people seemed to support Rumsey. UC Davis had experts who supported the Rumsey theory of lung contamination from mining residue. But eventually it got resolved.

I think that's why Yolo County was the last to approve the EIR. Although, if you look at it, the potential impact is much greater on Lake County because after all, they have the residue of the refining process and there's a whole valley in Lake County that's being filled up with the residues from that process.

Swent: And more of the people lived there and the traffic, the whole social impact was greater there, wasn't it?

Hickey: Yes, that was true.

Napa County's Concern over the Knoxville-Berryessa Road ##

Swent: And the traffic from construction people--

Hickey: Not only on the initial construction but also the continued operation. The Berryessa-Knoxville Road between Lake Berryessa and the mine site is a very narrow road and there are five at-grade stream crossings. In the spring, those can be flooded. Napa County's concern was that deliveries should not be made

through Napa County unless Homestake was prepared to improve the entire road from Lake Berryessa to the mine, which is a rather long stretch of road and would have involved numerous bridges to get over those creeks.

To avoid that, Homestake agreed that they would not accept delivery of materials at the mine site unless it had been cleared through Lower Lake. In other words, if you were delivering a load of material to the Homestake Mine during the construction period and you showed up there and you hadn't cleared it through the Homestake office in Lower Lake, they wouldn't accept delivery. And the reason for that was that as long as there was no impact on the Knoxville-Berryessa Road, Homestake did not have to spend the money that would be needed to improve the road. But if deliveries and if traffic began to appear on that road, then Homestake would have to improve the entire length of the road. So, all the deliveries were clearly going to come through Lake County.

Of course, Lake County was looking at the revenues from the gold processing plant and the employment, which I recall was about 235 jobs. I think in the letter you sent me, you said 300. So, that's 75 more jobs or sixty-five more than they originally thought the project would generate.

Swent: It was up around 700 during the construction phase.

Hickey: During the construction there was this hue and cry from some local residents, i.e. "How many local people are being hired? They're hiring people from out of the area." All of those sorts of things that go with most big projects certainly occurred with this one.

Reclamation of Old Mercury Mine Sites in Napa County

Swent: Was there local opposition in Napa County at the beginning or at all?

Hickey: Not really. There was opposition from--as I recall, one gentleman right in the mine area who had an earthworm farm. He thought the blasting would shake up his earthworms. We had a couple of people who had bought either retirement or vacation home sites in the mine site area. Eventually, they sold to Homestake at probably a very good price. But other than that, Homestake had gone to such extremes with D'Apollonia and so on that most of the environmental concerns were being taken care of and since there was nobody really living there, and the prospects for cleaning up some of the old mercury mines looked pretty good. Who else would ever go in

there and clean up those old mercury mines? It just wouldn't happen. Certainly, the county didn't have the money and the state wasn't going to do it.

Swent: Had you seen that area before they went up there?

Hickey: Oh, yes, I had been there.

Swent: It was pretty well messed up.

Hickey: It was a very much messed up area. And you know, it's always a surprise today when you come around the corner and see the gold mine buildings there because you don't expect to see anything of that magnitude sort of out there in the middle of nowhere.

Swent: It's pretty shocking.

Hickey: Yes. Homestake, also, you know, not only had to improve the Morgan Road to two twelve-foot lanes but they had to go right through the Lower Lake downtown area and pave the whole street to the state highway. Somebody told me they had \$125,000,000 invested before they ever got around to getting any gold out of the ground. But now they just had the celebration of the two millionth ounce. Multiply 2 million ounces by seven tons of rock and you can appreciate the size of the project.

Swent: Yes, a lot.

Hickey: Yes. It's the magnitude. Actually the prospect for the gold mine is not only just for the local ore. They also arranged to solve the problem at the Empire Mine in Nevada City. Homestake agreed to take the old spoils piles from the mine and haul them down to Napa County to process them. We agreed because they were solving a problem in one of the state's parks.

Unfortunately, they never bothered to come and ask us about it. We simply discovered that they were hauling in ore from another county. The gold content in the old spoils was greater than what they were digging out of the ground in Napa County. I was told they made \$10 million in processing the Empire Mine's tailings.

Empire Mine Tailings: "Reagents" or "Ore"?

Swent: It was chemically different so it was advantageous in the process out there.

Hickey: The spoils were leaking toxic material into a nearby stream. And by hauling it away and processing it, they said it was a chemical--what do you call those, not a chemical. You add a--there's a word for it--reagent. They were using it because it was weathered material and it acted as a reagent in the retorts and so consequently, they didn't see it as ore. They simply saw it as a part of the processing operation and they didn't have to buy this material, this reagent, in order to use it.

We saw it as the prospect of opening up all of northern California for every tailing leftover from every old gold mine. Our concern was that Homestake did not apply for a permit to process all of the tailings in northern California for every old gold mine that may exist. That's a whole different program. If you're going to open up a northern California gold mine clean up program, then you're going to have to come back and we're going to have to go through this whole thing again because now you're talking about hauling in all of the ore to be processed.

This material is considered to be very toxic. And they did have a spill on the Morgan Valley Road. It could have fallen down into a nearby stream. It didn't at the time because they'd be hauling in the ore. There would be a different set of problems than when you're digging, processing and burying it as part of a closed system. It's nice and tight--and at the end you take out the gold bars.

Swent: How did they get it from the Empire? They came over--

Hickey: They hauled it in big trucks.

Swent: Yes, but what route?

Hickey: They came down through Winters and over through Lower Lake and down Morgan Valley Road.

Swent: Okay.

Hickey: And that's where one of the trucks tipped over.

Swent: Twenty? Is that the route up there?

Hickey: I think it is.

Swent: I think so. So it didn't come up from Berryessa, anyway.

Hickey: No, because of the Berryessa Road improvement condition they're very careful. They don't want to build that road. That would be a tremendously expensive piece of construction.

Swent: So there was a controversy over their bringing that ore in from the ore tailings from the Empire.

Hickey: Yes, because--

Swent: It was tailings.

Hickey: It was tailings. But even so, when you figure one ounce of gold in seven tons or so, this ore was richer than what they were digging on site.

Swent: How did you hear about it?

Hickey: We had heard from the Nevada County planning people. They appreciated the county's willingness to let Homestake process the ore and solve the pollution problem of the Empire Mine.

Swent: And you hadn't even known they were doing it.

Hickey: We hadn't known they were doing it. It seemed like a good idea but the implications of it were tremendous. We had to correspond with them and basically say--

Swent: Lower the boom.

Hickey: Yes. We said, you don't have a permit for this activity and if this is what you want to do, come in, file a request for a permit and we'll start talking about what's involved in processing all of the old gold mine tailing in northern California which is a totally different program. But a good gold mine I understand is one where for every ton of ore you process, you find a new ton of ore. Homestake had found 2 million new tons or more of ore lying all over northern California. It still has that potential for them since they have the processing plant and the facility. But I don't know what the logistics would be in processing that kind of a permit. But Homestake's processing plant is up, it's running, and I assume somewhere down the line they'll probably get into that question.

Swent: The D'Apollonia report was to establish their baseline studies, wasn't it? And I understand, they did get--there was some involvement with the Native Plant Society here in Napa. They were pretty active in--

Hickey: Well, that could be. Some of those negotiations between D'Apollonia and the Native Plant Society may have been to satisfy the Native Plant Society. And it went on around the counties involved. I expect that if the plant society had not been

satisfied, we would have heard from the plant society at the public hearings.

Environmental Safeguards Satisfied Local Interests

Swent: That's I guess what I was wondering. Did you have at the public hearing--were there people in Napa that were pressuring one way or the other for this or against it?

Hickey: We had people who were concerned, the Sierra Club, the Native Plant Society, etc. Yes, we did have people who were concerned. You have property owners in the area who are concerned what it might do to the value of their property. You have people who are concerned about, "We're downstream from the mine, what if the cyanide runs into the creek and we're pulling water out of the creek?" There were those kinds of concerns and Homestake did a very good job of explaining all of the safeguards that were being built into the program.

If this had been a straight out strip-mine operation, I don't think they would have gotten to first base because I think the decision would have been that there was too much risk in the process. But they went to great lengths to do the analysis, and provide the necessary safeguards. There were monitoring wells built all around the disposal sites. All of the top soil was preserved to eventually cover over the site of the processing materials. All of the waste rock sites and so on were analyzed. The plans for reclamation were all thought through. In other words, there had been a tremendous amount of advance work.

I think a credit to Homestake was that their preparation met or exceeded the environmental standards so that the processing could focus on the issues of the mine without the environmental issues being the major subject, which is different from a lot of projects. The issues of the actual activity becomes primary or the environmental impact becomes primary. Now, in Yolo County, as you can see, the environmental aspects became a primary concern. But if you look at it from Yolo County's standpoint, they had an additional lake and they had 20 percent of the ore. That was the benefit to Yolo County.

Swent: What has the long term impact been on Napa County? Or the short term, for that matter.

Hickey: I think it helped clean up the mercury mine in the area that had been a problem and would continue to be a problem for the county.

Swent: Was the Reed Mine in Napa County?

Hickey: I don't remember that one.

Swent: That's one they cleaned up.

Hickey: That was one of our big concerns. I think, obviously the revenues from it, from an area that didn't--

Swent: You've been the biggest beneficiary of the tax, haven't you?

Hickey: Yes. The basic ore body, once it's established and the first bar is poured, the tax rate is set and as the ore body diminishes, the tax diminishes. Of course, the minute the gold mine was established, we got into some differences of opinion as to what the ore body was. The ore body that was so big when they were talking about it and when we approved it, suddenly shrank according to them once they started processing the ore. [laughs] I don't think that was a major surprise.

Swent: That's negotiation.

Hickey: That's negotiation. The county obviously benefitted from a tax provider in a part of the county that really was not agriculturally promising. There was nothing on the land itself although just north of there in Lake County, the Guenoc people are very successful in raising grapes and producing wine. So, I think it has been a financial benefit and it has been an environmental benefit in terms of cleaning up the mercury mines. I think most of the employment benefits went to Lake County. Of course, most of the impact also for the schools and the housing has been in Lake County not in Napa County. It wouldn't make sense to commute from Napa County unless you wanted to drive the Knoxville-Berryessa Road every day.

Swent: There are a few people who do that.

Hickey: Which is all right except in the winter time when those creeks can get pretty high. You can find yourself having to go the long way around but obviously you could do that. Other than that, there's always the long term future of what will happen at the mine site. The agreement was that when they were done with the mine itself, that is if they found a mineable vein in the bottom of the hole they would consider using a shaft mine to pursue it. That's a lot of years down the road.

Swent: I think they're looking for that now. They've started a little underground exploration, I think.

Hickey: Hopefully, they would like to find an ore vein. However, one of the problems is the proximity to the geothermal resource area. You may find yourself in hot water.

Swent: In more ways than one.

Hickey: There's hot water in the Napa Valley. What's considered geothermal water temperature extends as far down as Yountville. Here they are in an area that theoretically they could tap into a hot water source and have a whole new problem.

Swent: So, the EDAC--their charge ended with the acceptance of the environmental impact report and statement.

Hickey: Well, EDAC had at one time proposed that it would last as long as the project would last and that it would be financed by Homestake. Homestake said, "We're tax payers. Why should we have to carry this additional cost to maintain EDAC?"

Swent: What would EDAC have to do after--?

Hickey: They would just continually monitor what was going on at the mine site.

Swent: They would be the monitoring agents.

Hickey: They would be kind of the watchdog. It was agreed that Homestake would fund a full time position on the Napa County staff who would serve as the monitoring representative for all three counties for an initial period of two years. Homestake funded that program. They funded a staff position and a secretary and all that sort of thing. We hired a gentleman named Jim Goodfellow out of Sacramento who had--

Swent: I've heard that name.

Hickey: He had a good background in the environmental and the geologic work. He was with us for fifteen months. He was simply a circuit rider. He went from Yolo to Lake County to Napa putting out little brush fires and obtaining information, checking and rechecking as to what was going on, what monitoring reports were due, checking the monitoring reports as they came in.

At the end of fifteen months, Jim left. We finished off the program using the county staff. That pretty much was the end of EDAC and that was the end of the Homestake funding although there was a ten-year monitoring program that was supposed to be in place that would ensure that the reports that Homestake were supposed to generate were completed on time, filed on time, and at the end of

the ten years then they were on their own. That would have been in 1993, which was after I left the county. But I assume the program was completed and Homestake is pretty much on its own, now.

Swent: I heard something about monitoring for seventy-four years.

Hickey: The monitoring goes on but without the surveillance or the checking by the counties as to whether the reports are filed. It's assumed now that the reports will be filed, that the work is being done, that there's no need for someone to look over the shoulders to see that it's happening. So, other than that--

Swent: I'm still--so EDAC, you were the coordinator. And these nine people met and each one reported separately to their own county, then? Is that the way that worked?

Hickey: Yes. At the planning commission meeting, our representative on EDAC would report what had happened at the last meeting. And there would be minutes of the last meeting. At the board of supervisors, the county's representative on EDAC would report to the board what had happened so that you had direct communication at the planning commission level and the board level. Or if they weren't there, they had the minutes I prepared. Or, we would hear from the planning commissioner. And they had backup people. If they didn't go, they'd send somebody else so that, yes, you had kind of instant one-on-one communication between each of these bodies and their representative who sat in on the meetings.

Swent: Did you think it really was effective?

Hickey: Oh, yes it saved a year or two in the processing of the permits because otherwise you would have had to have written letters back and forth, exchange telephone calls, go back and talk to this body, go back and talk to that body. Yes, it really did. It shortened the process and it gave Homestake the opportunity to deal with one body as opposed to nine bodies which would have been more time consuming. You have to do the same dog and pony show nine different times. It really stretches out the whole time frame.

Swent: I think I asked you earlier and I don't recall what the answer was. Are EDACs a standard procedure in other places?

Hickey: I would assume so but I don't know it to be a fact. I guess you don't think that what you're doing is unusual or different. To us, it seemed like the natural thing to do. As I say, we cut our teeth on the GRIPS program and we realized that this was the only

way we were ever going to get anywhere with this program. But I don't know if that's true in other counties or cities.

Swent: Nobody has ever called you and said, "Hey, you're doing something exciting there. How does it work?"

Hickey: Not on that particular project. It wasn't that well known. I mean, here we had a proposed gold mine that impacted three counties. The three counties got together and worked out the details. Where would the publicity come from? It just seemed like Homestake had applied for a permit and the three counties gave them a permit. What's unusual about that?

Swent: I think it was quite unusual.

Hickey: Well, nobody noticed it was going on so nobody thought it was unusual. We didn't get any inquiries from anybody per se.

Swent: Of course, maybe other projects in the state are all in one county. I don't know.

Hickey: Well, that could be. If you are in one county, that would be different. If they were going to get the water and the gold and the processing all in our county, then obviously--

Swent: It wouldn't even have to be gold.

Hickey: Well, it could be silver, could be timber, could be whatever.

Swent: There are a lot of things that go on in more than one county.

Hickey: Yes, the concept of regionalism is pretty well established. Now, you have many regional agencies. The Association of Bay Area Government (ABAG) still functions. You have regional planning agencies in Monterey and San Diego. And you have the Los Angeles regional planning commission. I mean, there are established bodies, now, in all of the metropolitan areas of the state. Our problem was we were dealing with a group that didn't fit ABAG's framework because we were in ABAG but Lake County wasn't and Yolo County wasn't. Therefore, ABAG didn't serve our purpose. We had to create a new kind of a region for that particular purpose. But the concept of regionalism was not new. Before coming to Napa County I spent six and a half years with ABAG on its regional planning program.

Lake Berryessa and Management Problems

Swent: Has there been any successor to this? Have there been continuing cooperation efforts among these three counties?

Hickey: No. I can't think of another program that has brought us that close together. The watershed for the Napa Valley is totally inside of Napa County. So, we are not dependent upon what happens in Lake County or what happens in Yolo County as far as water in the Napa Valley is concerned. If our watershed extended up into Lake County, we might have a problem. But we have our own watershed and Lake Berryessa is strictly for Solano County so we don't have any impact there. We just provide the water. We were supposed to have a reservoir built in Knight's Valley in Lake County for Napa County but the state stopped the program or BLM stopped the program before they built it.

We lost the Monticello Valley to Lake Berryessa. It was a beautiful agricultural valley. As rich and as potentially productive as the Napa Valley. The lake covered it and all the water from the lake goes to Solano County. We don't get anything but the lake and the boaters and the recreationists and all those good things. That's another whole story--Lake Berryessa.

Swent: Monticello was the--

Hickey: Yes, the town of Monticello.

Swent: It's a shame, isn't it, in a way.

Hickey: Yes.

Swent: I suppose the boaters don't think so.

Hickey: No, and it's definitely a boating lake. When you flood a valley there are no beaches when somebody steps off the shore--you're in twenty feet of water. It never made for any recreation use other than boating.

Well, concerning Lake Berryessa we had a lot of experience in working with BLM and the state parks. The county took over the administration of Lake Berryessa because nobody else would. We did that for years and years and finally gave it back to the BLM because we couldn't get a negotiable lease for the concession areas. The state wouldn't put any money into the lake. The federal government wouldn't put any money in and the county said well, "If we're going to administer it, and there's got to be facilities, we'll do it with concession areas. Get

concessionaires to go in and build the necessary facilities." And that's how the concessions got into Lake Berryessa.

There was another program where we were working with state agencies and federal agencies to try and resolve a problem that in this case wasn't our problem. We got the lake because President Truman and Governor Pat Brown thought we should have a lake to provide water for Solano County. And if it wasn't for the honor of the thing, if we had received some of the water--however you can't oppose a project and negotiate water rights from it on the side because it looks like you're not serious about your opposition.

Swent: Right.

Hickey: But like I say, that's a whole different--

Swent: Was that before you were here?

Hickey: Oh, no. I was also in the middle of that problem.

Swent: You were in the middle of that.

Hickey: Oh, yes. If you were a concessionaire and the county told you to make improvements to your water system and you went to the bank and said, "I want to borrow a half a million dollars for my water system," and they say, "Let's see your lease," and the lease says you can be cancelled in ninety days. Now, why should we loan you a half a million dollars when the feds can shut you down in ninety days? Why don't you go somewhere else for your money?" So they would come back to us and say, "Hey, what can we do? We went to the bank and the bank won't give us any money."

So we would go back to the federal government and the state and say, "Hey, you know, give us a negotiable lease. Do you want improvements? We'll get improvements but you've got to get these people a lease that they can bank." Never could convince them. Things would get lost in Washington and they wouldn't get signed in Sacramento. Finally, we said, "Hey, guys, here's your lake back."

Swent: So they run it now.

Hickey: They run it now, yes. They built a beautiful headquarter building. What we used to use for an entire office structure, they turned into a men's toilet. They have a nice staff. It's working great. But it's now operated by the federal government.

Swent: That's BLM. I see. Well, things do get extended, don't they?

Hickey: We get a lot of interest in calls and I just had five people last week from Oregon down here to look at the Napa Valley and the agricultural protection program.

Swent: It's a model.

Hickey: Concerning the gold mine, it didn't surface as a major problem other than the controversy with the Rumsey folks and the air pollution problem. Other than that it was fairly straight forward. As I said, I think it went straight forward because Homestake took a lot of time and spent a lot of money and a lot of interest in doing the environmental work up front. And as you know, they have received environmental awards for their program on a continuing basis. Homestake never had the best reputation when it came to environmental matters. We used to have people show up at meetings and comment on a Homestake mine somewhere else where environmental problems had occurred.

Swent: They had some super fund citations.

Hickey: Super fund, right. We used to go through all of that. But they've certainly done an outstanding job in Napa County. And not only because the county says so but because the environmental people keep saying so. Ray Krauss has done a marvelous job. I'm glad he's still with them because I thought, once the program was up and going, the engineers would take over and he'd be gone.

Swent: In fact, he just won a big national award.

Hickey: Well, he should. He's contributed a lot to that program and he's certainly contributed to the credibility for Homestake. I mean, [even] if it wasn't good environmentally, it was good PR to keep him.

Swent: He was good environmental, too.

Hickey: He delivered what they said they were going to do. They said they were going to do something, they did it. You didn't have to run around and ask them, when are you going to do it or how come you didn't do it and are you going to do it. I've never had any other dealings with Homestake gold mine so I don't know how they've been elsewhere but in their dealings with Napa County, it was a good experience. I don't blame them for running off and processing the Empire Mine. I mean, that's a great opportunity and \$10 million isn't something you can scoff at. It was tried and it worked. But it wasn't what their permit said.

Swent: But on the whole you think it worked out pretty well?

Hickey: Yes, I think it worked out very well. The successful completion of all the preliminary studies, the multi-county, state and Federal coordination of the review process and the issuance of the multiple permits required demonstrated that a large number of diverse governmental agencies can work together in processing a multi-county project. Without the total cooperation of the applicant and with all the agencies involved, the project could easily have been delayed or denied at several points in the processing procedure.

The processing and approval were, in fact, completed in record time. While the Homestake Mine project may not be the first of its kind to be approved, it can serve as a model from the 1980s on what can be done through coordination and cooperation.

Regional Oral History Office
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Berkeley, California

Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

Irene Jago

THE JAGOS OF JAGO BAY, CLEAR LAKE

An Interview Conducted by
Eleanor Swent
in 1995

Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

All uses of this manuscript are covered by a legal agreement between The Regents of the University of California and Irene Jago dated October 19, 1995. The manuscript is thereby made available for research purposes. All literary rights in the manuscript, including the right to publish, are reserved to The Bancroft Library of the University of California, Berkeley. No part of the manuscript may be quoted for publication without the written permission of the Director of The Bancroft Library of the University of California, Berkeley.

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Irene Jago, 1995.

INTERVIEW WITH IRENE JAGO, THE JAGOS OF JAGO BAY, CLEAR LAKE

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INTERVIEW HISTORY--Irene Jago

Irene Jago was a teacher at Lower Lake High School who married a local businessman and member of a prominent local family. I interviewed her on a warm afternoon, 19 October 1995, on the terrace of her home which was also the office of Jago's Resort overlooking Jago Bay at the south end of Clear Lake. As a good teacher, she made clear for me the distinction between Clear Lake, the lake, and Clearlake, the town.

Mrs. Jago was a somewhat reluctant interviewee; widowed and living alone, she did not want to reveal her age, and preferred to discuss her husband's achievements rather than hers. She recalled his mining enterprises, primarily at the Konocti Mine, as well as his crucial role as leader of the Clear Lake Water Quality District. She says of her students that although many of them were poor, "they were neat-looking, clean-looking kids; they had the whitest shoes in California, I'm sure." Regrettably, she died before the interview transcript could be sent to her for review. When I attended her memorial service at the old Lower Lake school house, I learned that she was born in 1912, and had been much loved as a teacher and intellectual leader in the community. The Konocti Study Club which she helped to found maintained a high level of scholarship for more than thirty years; it was reported that just two weeks before her death, she had presented a two-hour dissertation on the Celts. She was also active in the Federation of Republican Women and edited their newsletter.

The tape of the interview was transcribed, lightly edited, and indexed in the Regional Oral History Office. The tape is deposited in The Bancroft Library and is available for study.

The Irene Jago interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1996, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent, Project Director, Research
Interviewer/Editor
Regional Oral History Office

The Bancroft Library
Berkeley, California
May 1998

Observer Community 3

er News

Irene Miller Jago

A member of Lower Lake (Jago Bay) community for 60 years
Irene Miller Jago, 85, of Lower Lake, died Saturday, May 24, 1997
at Redbud Community Hospital in Clearlake.

Mrs. Jago was born Oct. 3, 1911, to Otis and Nellie Miller in Basher, Mo. In 1920 the family moved to Lindsay, Calif., where she finished grammar school and high school, having graduated from both schools as valedictorian and women's honor speaker. A fifth college year at Stanford University qualified her as a secondary teacher, and she became employed at Lower Lake High School, where she taught for a number of years.

In 1941, Irene married John Jago, a local resort owner, and they managed that business, which had been founded by his father, Lake County pioneer Louis Jago. Mrs. Jago was active in community affairs, including the Konocti Study Club, and the Republican Women, and was always interested in Lower Lake High alumni activities. She was preceded in death by her husband in 1993. She is survived by four sisters, Ila Clinton of Ojai, Reva Ward of El Cerrito, Roena Belcher of Paradise, and Retha Garner of Glenhaven; and a number of nieces and nephews. No services were requested. Cremation arrangements were made with Lake County Memorial Crematory in Lakeport, and there will be private interment at Lower Lake Cemetery. Donations may be made to the Lower Lake Historical Schoolhouse Museum, or your favorite charity. Arrangements are by Jones & Lewis Clear Lake Memorial Chapel in Lower Lake.

INTERVIEW WITH IRENE JAGO

IRENE JAGO, THE JAGOS OF JAGO BAY, CLEAR LAKE

Irene Jago, Lower Lake High School Teacher

[Date of Interview: October 19, 1995] ##¹

Swent: Let's begin by having you say how you came to be a member of the Jago family.

Jago: Well, I came here in the mid thirties, right out of college, with a teaching credential, and I came here to teach at the Lower Lake High School. I was in the English department and Spanish department and the art department there for several years. During the meantime, of course, I met my husband here.

Swent: Classic western story. The schoolmarm and the local eligible bachelor.

Jago: Well, yes. And that surprised me quite a little bit because I didn't expect to find anybody in an area like this. John was quite a little bit older than I was, but it was all right. That was okay. I found him very compatible. He's a very studious type person.

John Jago, Jr., Electrical Engineer and Community Leader

Swent: What was his work? What was he doing?

Jago: Well, he was an electronics engineer by training and by inclination, and, although he would have done well in any engineering field, he was definitely a research type person. But he chose electronics when he went out to school to get his training. At the same time, he was

¹## This symbol indicates that a tape or a tape segment has begun or ended. A guide to the tapes follows the transcripts.

very outdoorsy. He loved to hike and all that sort of thing. And he really liked being outdoors, and that's the reason that he wound up in Lake County again, even after his training, because he didn't feel well. He had very poor health in industrial areas, he found out, particularly in the Bay Area and so forth, and so he was always fleeing back to Lake County to restore himself. Finally, because they had bought this property in 1909 and were going to have to sell it or do something else with it because his family were getting older, he took it over, you see, and so we stayed here.

Swent: Had his grandparents also been here?

Jago: No, just his father. The father came here from England and was a part of an English colony that was across the lake, over where the Safeway now is. Mr. Bigbane of "Early Lake County History" [Lake County History Bulletin] had an English colony over there, and he came there. That's another long story, which I won't get into.

But anyway, then he, Mr. Jago, Senior, continued to live here. Married here, and had three children here. And John was therefore a local Lake County native-born citizen. He went to the school at the old Lower Lake grammar school because somewhere along the line they acquired a general merchandise store and a big old Victorian house in Lower Lake, and then he went out to school to get his higher education.

Then he came back to Lake County, and he felt so much better up here than he did in the Bay Area that he did work of a scientific nature as much as he could. He worked for PG&E [Pacific Gas and Electric] because PG&E was just coming into the county. He did installations for them. He was a supplier of and the careperson for all kinds of electrical equipment and was the fix-it man for the whole community, on everything. He helped his family get started with the resort here. He did all the plumbing and electricity, electrical work, all that sort of thing, when they were fixing the resort.

Swent: We should say that this area is called Jago Bay.

Jago: Yes, after his father. So therefore that's the reason he happened to be here. Then he took a very active part in all kinds of community things. He was thirty-five years with the Mosquito Abatement District. He was an officer and leader of the Clear Lake Water Quality Council. He almost virtually single-handedly, well, this is with his wife's help, initiated the Clear Lake Water District, which was formed to protect the waters of Clear Lake. And he was active in all sorts of things. He was part of the Sportsman's Club and anything that had to do with Clear Lake. He really gave a great deal to the community.

Swent: Was he involved in the building of the Cache Creek dam?

Jago: He was a boy when that was built. But his father owned this store in Lower Lake [chuckling]. And the suppliers, I mean, the people who worked on the dam, would come by his father's store. They would load up for the day, you know, and go down to work on the dam. (This was about 1914.) And so little Johnny would get on the top of a wagon during the summertime. (I'm sure he had to be in school in the wintertime.) But he would get on the top of the wagon and drive down to the dam with them, and he saw the dam being built. He remembered there was a crack across the dam, where they used one sort of cement and then another form? He said he remembered the time that the change was made because there was a great hullabaloo about whether they were using proper materials for it or not. He said that actually he thought that part of the fun he got going down there was just seeing them work. He was technically-minded from the day he was born. But he said also he enjoyed the ride up on that swaying wagon. The seats [chuckling] swayed back and forth, and he enjoyed that! But he did see the dam being built.

And devoted his entire life to Clear Lake. He was one of the principals in the court settlement between Lake and Yolo [Counties]. And actually he's signatory to that latest court stipulation for the two. He did a great deal for Lake County all the time he was here.

So that's how I happen to be here, and that's how he happened to be here.

Swent: You said one of his earliest mining ventures was at the Baker Mine.

Jago: Well, I think that's what he told me. I think it was the Baker Mine, and I know it happened long before I knew him. It's while they had the store in Lower Lake. He and his father either worked over the tailings or retorted some of the material from it. I do not know what. They were out there for maybe a month, maybe a year or something, just working on that. It was just an arrangement, a temporary arrangement with them. That's all the connection he had with it, although he did keep up on all the mines all over the county. He was very prospect-minded. He knew personally Mr. Worthen Bradley, and he knew the superintendent of the Sulphur Bank Mine.

Swent: Do you know his name?

Jago: Mr. Wolbert. As a matter of fact, I had Mr. Wolbert's children in my English classes, too.

Swent: Was that mine still working when you came here?

Jago: Yes, it was. It was still working. I'm not sure, but it seems to me that it was working up through the war because it was profitable.

Swent: That's the Second World War.

Jago: Yes, Second World War. I had come here in the mid- to late thirties, and it was still operating by that time. As a matter of fact, there was quite a colony of people who lived out there by the mine or in Clearlake Oaks, and the students came from there to the high school, and I had them all in high school.

Swent: Had the Depression had an effect here in Clearlake?

Jago: Yes, it did, of course. It did, really. Many of the children in school were from very poor families. Some of them couldn't have rubbed two nickels together in their pockets, I'm sure. But the mining at that Sulphur Bank Mine was a big help economically in the community. Nevertheless, they were neat-looking, clean-looking kids. They had the whitest shoes in California, I'm sure, during the bobby-sox era, you know. And they were bright and well behaved and well disciplined. This was all before the war. I found teaching there very satisfactory. That's one of the reasons I stayed on as long as I did because my teaching situation there was so pleasant and so entirely satisfactory.

Swent: What effect did the Second World War have?

Jago: Well, it had quite a lot of effects. Families moved up here from Vallejo and parts of Oakland and so forth, as men went to war, and they were looking for someplace inexpensive for the families to live while they were away at war. And then, besides, Clearlake was just becoming a resort county, and that was part of the reason, too. When we got back after the war (John and I were away for four years during the war), and when we got back, we found it quite different.

Swent: Where did you go?

Jago: Well, he did electronic research at the old Marconi Lab in New Jersey, with the Signal Corps. He was with the Signal Corps, and the Signal Corps had taken it over and called it Camp Evans. Then, after VE-Day, when research was slowing down--incidentally, at that camp, as I mentioned in here, they did research on the IFF, the Friend or Foe system, and a lot of very helpful work there for the war effort. After VE-Day, when they were beginning to disperse, he had six months, I think, to go, and so he was transferred out to the Manhattan Project on the University of California campus. He was up at the radiation laboratory for about six months.

Swent: So you came back here then.

Jago: Yes. He was in very poor health by the time he came back, because he not only had been subject to a lot of radiation there at the lab, where they were experimenting all the time, but he also had been subject to a lot of other things they didn't realize the danger of at the time. In New Jersey they worked a lot with carbon tet [rachloride], for instance. They had their hands in it, and they

didn't realize the seriousness of these things. And so he came back in very poor health, full of allergies, and decided that he had better get up to the country and renew his health again, the same as he had been doing all of his life. He felt better here, and his family gave him the property, and so he stayed on here.

Swent: And lived to quite an advanced age.

Jago: Yes, he lived to be ninety-one. By taking just excruciatingly good care of himself, health-wise. He was something of a health nut about things.

Swent: Well, it paid off, I would think.

Jago: And he loved outdoor exercise. He swam like a fish, felt at home in the water. Did a lot of hiking. And [chuckling] I might mention that he also, in his younger years, did a lot of ballroom dancing, though I don't know if that helped him any, exercise-wise, or not [laughing].

Swent: Maybe it did. I think it did [chuckling]. Do you think the mercury did any damage to him, then?

Jago: Well, yes, it did. It made him allergic. He acquired the salivation, mercury--

Swent: Yes, I remember you told me he had been salivated.

Jago: While he owned the mine on the mountain. And he became very allergic to things he had never noticed before, particularly seafood and various kinds of proteins. There was a time that he couldn't eat bananas. Various things. And he had to be extremely careful when he took antibiotics that he was not allergic to them. And, of course, this was from the quicksilver. And then the work that he did at the lab just increased all of this, you see. But he found Vitamin C extremely helpful in helping him recover, and lots of outdoor exercise. That's what he really believed in. So he came out all right.

Swent: We mentioned just a little episode, the Baker, but then had he done any other mining before the Second World War?

Jago: No, he hadn't. Oh, well, yes, he owned the Konocti Mine from 1929.

The Uncle Sam/Konocti Mine: Gold, Quicksilver, and Kaolin, 1929-1967

Swent: Yes, let's trace that. How did they acquire it?

Jago: He and a partner, Charlie Macheboeuf, of Konocti Bay. He and John were very good friends, and they went prospecting all over the state together. They were always doing some kind of prospecting things together. They loved doing prospecting. So they took up the mine from the government in 1929. They filed on the claim and got it.

Swent: That was an existing mine.

Jago: Yes, it was a gold mine. It had been called the Uncle Sam Mine before the sale. But it had acquired the name Konocti in some way. I do not know how. But it was the Konocti Mine when he took it over. I do not know who had owned it previous to John. I only know that he and Charlie took it up in 1929.

Swent: Actually bought it?

Jago: No, you didn't; you filed on it, and you received--I don't think you paid anything to the government for it. You filed on it, with promises to prospect it and to do a certain amount of work on it every year. That was called their assessment work. So he had this yearly assessment work he did, and I know after he and I became acquainted and after we were married, we used to take Sunday picnics and go up to the Konocti Mine quite often while he did assessment work.

Swent: What did that consist of?

Jago: Continue to prospect, mostly. With him, it was. Now, he and Charlie built a retort, a beautiful, big, brick retort.

Swent: How big?

Jago: Oh, I'm very poor on feet. I haven't the slightest idea.

Swent: Well, two feet? Twenty feet?

Jago: No, I don't even remember.

Swent: What did it look like?

Jago: It was a retort, anyway. Enough to process the ore which they found in the mine, you see. They would process it.

Swent: Maybe you could describe what it looked like.

Jago: Well, it was of brick. That's really all I remember about it.

Swent: Like an oven?

Jago: Sort of like a big oven, you know, yes. And they kept the fire going day and night and day and night and day and night, you see, in order to process this ore which they took out of the mine.

Swent: What did they burn? What fueled the fire?

Jago: Oh, manzanita brushwood they picked up around about.

Swent: Did they do the mining themselves?

Jago: They did this themselves for, oh, I imagine that they were a matter of six months to a year, something like that. I think they enjoyed developing it more than they enjoyed operating it [laughing]. In fact, I think John always enjoyed doing the prospecting. I don't think he enjoyed mining very much. But the mine at that time was a deep tunnel mine and always was a deep tunnel mine. It had little tracks. And little cars in it, you know. And even after I knew him, he used to go back into the tunnels. I wouldn't go back. I'm too claustrophobic for that. But he would go back and look at the timbers and see if they were safe and would also take flashlights and headlights and be chipping around to see if he could find more ore. And sometimes he did find just beautiful samples of ore. Then he would take that out. This is a little bit later, after they had the first retort.

But I'll go back to Charlie. He and Charlie worked there for that long a time, but John began to notice that he was getting reactions to it.

Swent: Was this before you were involved?

Jago: Yes. I'm going back to 1929 and '30, and I wasn't here until the late thirties.

Swent: They must have been up there a lot of the time, then.

Jago: They went up and camped. I don't know if they camped or had a little shack. I don't know what. I don't really know. This was before my time. And they had a mill building there. I think that was left over from some previous owner, perhaps. But anyway, they got their fill of it after they had all the prospecting they wanted, and they kind of closed it down. After that, they just prospected.

Swent: What are the symptoms of the salivation?

Jago: I don't know if it's the same with everyone, but with him it had to do with allergies.

Swent: How did he know first that he was becoming salivated?

Jago: Well, he had been very fond of seafood. His whole family had been very fond of seafood, and he got to noticing that he couldn't eat seafood without terrific reactions--nose dripping, eyes dripping. As though he had a very intense cold, and he just, after he soon began to realize what it was, he just had to leave those things alone.

Swent: This was before you knew him.

Jago: Before I knew him, although one of the first things I knew about him was that he was allergic to shrimp. He had to watch it very carefully. One time I had been home, which, to me, was the San Joaquin Valley, and had come back up on the bus, and he met me in Calistoga at the bus. We went into the old hotel there, the Mountain View Hotel, for dinner, before he should bring me on up to Lake County, and he stopped as he was eating his salad, and he said to the waitress, "Does this have shrimp in it?"

And she said, "Oh, yes." He got right up, went right into the bathroom. I don't know if he even swallowed one bite or not. But he had the most awful reactions to it. I'd never seen anybody with this sort of thing.

But anyway, we drove home, and I kept commiserating with him, was there anything I could do? And so forth. He was trying to drive with one hand and wield his handkerchief with the other, and I kept trying to commiserate with him. Finally, he said to me, "If you'll just keep your mouth shut, I'll get us home somehow." [laughter] I'd never met anyone who was allergic to things before.

Swent: I think sometimes salivation affects people's teeth.

Jago: I don't know that it did that, but it made him just very allergic. It made him very allergic to dust.

Swent: He had not been before.

Jago: Yes, he had been somewhat allergic, but it exasperated all these things. And then the work he did at the University of California exasperated it even more, you see, so that's the reason he was anxious to come back at the end of the war.

But anyway, I came into the picture then, after he and Charlie had owned it and had given it up as a thing more than just a plaything, and John prospected there, had fun with it. He didn't do enough at that time. He had a little retort he built down here, on this premise, which he would bring ore samples home from there, and he'd run out this quicksilver at this little retort he built here on the premise. But they didn't operate it commercially after that.

Then people would want to buy it. He never was enthusiastic about selling it to anyone because they usually wanted to use surface

equipment, and he knew that that was not going to net them anything. Even after we were married, people would come here and say to me, "Is this where Mr. John Jago lives?"

And I'd say, "Yes."

"Does he own a mine up on the mountain?"

And I'd say, "Yes."

"Well, I'd like to speak with him because I'm interested in learning something--I might want to buy the mine from him."

So I'd tell them when they could see him. And he would be so discouraging to them. He would say, "No, you cannot do that. That will not work. No, this will not work. No, that will not work." And they invariably were people who were in some other profession. They were either insurance men or maybe a city father someplace, who found it romantic to own a mine. And they didn't expect to do it themselves. They expected to have it done.

One time I said to him, "John, if they want to buy the mine, for heaven's sake, why are you so discouraging?"

And he said, "Well, I don't want to see hem lose their shirt up there, and that's what they're going to do."

But nevertheless, I would say that over the time that I knew about, he must have sold to at least ten people, and invariably they would try out what they thought they wanted to do, rather than what he thought they ought to do. And invariably, after two or three years, they'd give it up, and it would revert to him. And then, given two or three months, somebody else would come along. Some of them were attracted by the name Jago because Jago is a Cornish name, and you know the Cornish are great miners. And some people, recognizing that it was a Cornish name, would be attracted. And also somebody had known another Jago someplace else, maybe once in a lifetime, and so they would come in to see about leasing the mine.

But he kept selling it like that all the time, until finally a Mr. Guion came along who actually paid out on it, and John was very glad at that time to get paid out on it, in 1967, because he was tired of doing the assessment work, and also he had problems with claim-jumping a little bit, and he just wanted to get out of it.

Now, during the war, he leased it to the Bradley Mining Company. I think Charlie was still alive by that time. They leased it to the Bradley Mining Company, and he and Worthen worked out whatever details were to be worked out, and John went up there, I know, and removed a big tank of propane gas which the last owner had left there, and moved it down here to the place, and it was about a

several thousand gallon tank of propane. He had to pump it all out and then move the tank down here and then pump it back in again, because he knew he was going away to war, and he didn't know what might happen to him, and he also wanted to leave his folks in a position where they would be sure to have fuel, so he moved that tank down here.

Up until then, they had been using--electricity had come in, finally. Electricity didn't come in too long before World War II. In some areas of Lake County it didn't come in until long after that. But at the same time, in case there was any problem at all, he wanted them to be sure to have heating fuel, too. This little thing I'm giving you explains to you how he had already discovered methane gas in the lake and had purified it to the point where they were using methane gas for their lights and heat in the house and in the cottages.

But anyway, he moved that tank down here and turned the thing over to the Bradley Mining Company. When he got back, he was very surprised to find the big, white deposits there because they had obviously done surface mining. Although he had warned them against it, that's what they had done. Because there had been no white showing at all at the time he gave it up, and he said, "Oh, they've done all this surface mining, which I knew that they wouldn't gain anything from."

But they did discover the kaolin. Well, I say discover. In commercial amounts. He knew it was there, but it had not been discovered in commercial amounts. And since that time, so far as I know, they have always been interested in the mine for the kaolin; those who did anything at all with it were interested in the kaolin, not the quicksilver.

Swent: Where did they market that, do you know?

Jago: Well, I don't know. Locally, I know. They made decorative garden things out of it, and they made white roofs, white driveways. Mr. Ware could tell you more about that than I could. I don't know anything more about it than that.

Swent: So this was only leased, you said, to the Bradley Mining Company.

Jago: To the Bradley Mining Company. It was just a lease, I believe. I don't believe that it was a sale. I think it was just a lease. If it was a sale, he got it back again, but I think that they were not buying it. I think that they were leasing it. I'm not positive about that. The land records in Lake County would show it. I'm not sure.

Swent: So they kept it, still.

Jago: No, no, no. They gave it up as soon as the war was over.

Swent: The Jagos, I mean.

Jago: Oh, yes, then it reverted it to John again. In something like the fifties, I believe it was. I think it was in the fifties, his friend, Charlie Macheboeuf, passed away, and from then on he owned it just by himself, and he kept up the assessment work on it, and he kept on [chuckling] selling it. Not trying to, just wondering what to do with it. He would always think, well, something may come along that's really right for this property. But nobody really wanted to develop it further for quicksilver, so what there is there, I don't really know, any further than what he found. Whether it would ever produce quicksilver again or not, I don't know, but they did mine it for the kaolin. [Added in a telephone conversation later: A disastrous fire destroyed the Konocti Mine buildings in the 1950s and one or two firefighters were killed.]

Swent: Was that the only mine that he ever really developed?

Jago: Yes, that's the only one he ever did. He went prospecting all over the state all the time! He even took a flying trip up to Moscow, Idaho, one time because some friend of his knew some interesting prospect up there. He didn't go to really see it for commercial reasons, but just for fun, I think.

Swent: What kind of prospect was it?

Jago: I don't remember. And I remember that he used to go up to the Sierras. Somebody would say, "Oh, I know a really good pot of gold, a really good prospect up--" So off they'd go for a weekend.

Swent: Looking for gold, probably?

Jago: Yes, gold, mostly. He had a brother-in-law who worked at the Sixteen-to-One Mine. This is before the war. And I think this brother-in-law lived through World War II. I think that John's sister was still married to him. His name was John Gardner, and he worked the Sixteen-to-One. I think I remember hearing John say he ran a hoist or something there at the mine. This sister of John's, who married John Gardner, had one son by a previous marriage. He is still alive. I don't see him ever because he lives up in Idaho. But once in a while I see something has to do with the Sixteen-to-One Mine, where, of course, he lived. He lived in Alleghany and grew up there. Well, he didn't grow up there. He was all through grammar school there, I think.

##

Swent: The Sixteen-to-One Mine is operating still, or again.

Jago: Yes, again. With a good deal of enthusiasm, I think, yes.

Swent: They have gone in with metal detectors.

Jago: After he passed away, the sister and his and her children moved out of the area. I went up to see the Sixteen-to-One Mine. I went up after she lived there. John and I just took a trip up there, just for fun. And I remember mostly the very terrible road getting in and out.

Swent: Yes, it's pretty primitive. Well, what about the Manhattan Mine? Were you ever aware of that?

Jago: No. I think I heard John mention it, but that's all. Where was it?

Swent: That's where the McLaughlin Mine is now.

Jago: Oh.

Swent: On Morgan Valley Road.

Jago: Yes. We took a trip out there one time, John and I did. He was very well acquainted with Mr. Lehrman, and we spent almost a Sunday out there. We found it very interesting, and John kept the material on it. Clippings on it. I'd give them to you, but he didn't have any personal experience with that at all.

Swent: Did the development of the mine make any difference to you here?

Jago: No, none whatsoever. To Lower Lake, I think it did a little bit. During the development of the mine. I don't know if it still does.

Swent: There was quite an influx of people.

Jago: They were around Clearlake. Actually, here, more people have come in looking for rental spots for people who work with the Geysers.

Swent: I see. That was before. That was earlier. Is it still continuing now?

Jago: Oh, yes. They still work up there.

Swent: But are people still coming in new to work up there?

Jago: Well, I have calls from people who are working up there. "Do you have rentals?" And I'll say, "No."

So I don't know if there's anything else I can tell you about.

Swent: The people that you have here on your property are people who live here all year round, are they?

Jago: No, they're all absentee. I'd say that about 90 percent of the time I'm here I'm the only one on the premise.

Swent: But a lot come in the summer?

Jago: Come in the summer and on weekends. There is another lady who lives here, but she owns a business in Lakeport and is gone a great deal of the time, so I don't really see her, even, very much. So that's the reason I say I think [chuckling] 90 percent of the time I'm here by myself.

There's one thing that I might read to you from this thing which you might want to read into your record. In this little thing about John, which was written for an organization that was--well, I'll just read the first paragraph to you, and then that will explain. Did I read into the record the first paragraph?

Swent: No, you did not.

Jago: I'll read that into the record.

Swent: Please do.

Jago: "The accompanying article was first written in the late 1970s." I am reading a note that I made on July 1st, 1993, after John had passed away. "The accompanying article was first written in the late 1970s, at the request of an organization in the county honoring those who had contributed to their community in the field of research and development." Along with others, John received a citation at that time at an awarding ceremony. With numbered-- for footnotes, I have expanded the original article, adding information I thought might be of interest to family and friends. In the original article, he had written this:

Let's see. "Back home in Lake County," (this is after his schooling) "he installed ranges and water heaters for PG&E and became sales agent, installer, and community fix-it man for radios, Kohler light plants, before PG&E had reached the outlying areas, and other electrical equipment. During this time, he involved himself with several quicksilver mines and did considerable research on wet methods of mercury extraction. After determining that was not a feasible method, he advised operators of other mines in the county not to attempt to use it. In his spare time, he was manager and therefore maintenance man for the original privately-owned telephone system also."

Now, I added to that, this footnote: "One of the mines was the historic Konocti Mine, which you see on the mountain and which he owned from 1929 to 1967, with a partner for the first few years. He realized that he liked the development and research having to do with a quicksilver (mercury) mine more than he enjoyed the actual work of

a miner. Thus, after he had developed allergies to the mercury, he decided to sell the mine. There followed a string of would-be buyers because there was always someone out there who liked the romantic idea of owning a mine. Invariably, it returned to John, as the buyer was never interested in the unromantic tunnel work which John always advised as necessary."

"During World War II, the Bradley Mining Company of San Francisco took it over. They are the owners of the Sulphur Bank Mine on the East Lake, the Alaska Juneau Mine (gold and so forth), and were the ones who used big surface equipment, leaving the white scar on the mountain. After the price of quicksilver dropped at the end of the war, they lost interest, and once more the mine reverted to John. The last buyer became interested in the exposed white rock, kaolin, used in making china and pottery, and eventually paid out on it on 1967. I do not know the present status of the mine."

This was from my reports in 1993. I've learned since that Mr. Van Pelt owns it. But I thought that might be interesting to read into the record.

Swent: Yes, indeed. That's very helpful.

Jago: That is all that I know. I'm sorry that John wasn't here to tell you more.

Swent: I am sorry, too, for many reasons. But I thank you very much.

[Mrs. Jago recommends the Oakland Tribune in the 1950s, a series of articles by a columnist called the Knave, devoted to the Konocti Mine and its repeated sales.]

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Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

James Jonas

LAKE COUNTY FUEL DISTRIBUTOR

An Interview Conducted by
Eleanor Swent
in 1997

Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

All uses of this manuscript are covered by a legal agreement between The Regents of the University of California and James Jonas dated December 10, 1997. The manuscript is thereby made available for research purposes. All literary rights in the manuscript, including the right to publish, are reserved to The Bancroft Library of the University of California, Berkeley. No part of the manuscript may be quoted for publication without the written permission of the Director of The Bancroft Library of the University of California, Berkeley.

Requests for permission to quote for publication should be addressed to the Regional Oral History Office, 486 Library, University of California, Berkeley 94720, and should include identification of the specific passages to be quoted, anticipated use of the passages, and identification of the user. The legal agreement with James Jonas requires that he be notified of the request and allowed thirty days in which to respond.

It is recommended that this oral history be cited as follows:

James Jonas, "Lake County Fuel Distributor," an oral history conducted in 1997 by Eleanor Swent in The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume IV, Regional Oral History Office, The Bancroft Library, University of California, Berkeley, 1998.

Copy no. _____



Jim Jonas, Lower Lake, California, ca. 1997.

INTERVIEW WITH JAMES JONAS, LAKE COUNTY FUEL DISTRIBUTOR

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INTERVIEW HISTORY--James E. Jonas

James Jonas is the second-generation owner of Lake County's principal bulk fuel plant, a business strongly impacted by the development of the McLaughlin Mine. In the days of California's first gold rush, the suppliers were the ones who most often made fortunes, but in the late twentieth century the picture is quite different, as Jonas reveals in a frank and articulate account. In November 1997 he accepted the invitation to participate in the oral history project, but it was not easy to schedule the interview. He is so busy it was hard to find a time when he could even talk on the telephone to make an appointment, let alone spare a few hours to sit down for an interview. Once it was scheduled, however, he stuck to the commitment and we interviewed on 10 December 1997 in his trailer office which was kept quiet and nearly without interruptions.

His office is east of Lower Lake on Morgan Valley Road, the same road which leads to the McLaughlin Mine. He recalls that when his father delivered fuels to Bill Wilder's One Shot Mining Company, "In those days, it was a dirt trail; ...it would take you half a day to get out there, particularly in the wintertime." By comparison, he says, "The road that exists today that Homestake built is like a freeway." He tells of his first call to Homestake's operation:

The first day they called me and they said, "Bring some fuel out here. You've got to fuel a couple scrapers." I said, "Okay." I had this little thirteen-hundred-gallon truck out here and I put about two or three hundred gallons, which I thought would be plenty. I got out there and I looked up at the tank and it was fifteen feet up there, and it's a five-hundred-gallon tank hanging on the side of this immense scraper that towers higher than my head. [laughter] I said, "I think it's time to rethink our scale here a little bit."

He eventually delivered thousands of gallons of fuel, employed many more people, and operated much more equipment, but his margin of profit did not expand in proportion, and government regulations are an increasing hindrance and frustration. He looks to the future with equanimity; he and his son have retrained into the heating and air-conditioning business, which will take over where mining leaves off.

The tapes of the interview were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Jonas on 6 February 1998. He reviewed the transcript carefully, making some

changes, mostly of spelling, and returned it within a week. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The James Jonas interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1997, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent, Project Director, Research
Interviewer/Editor
Regional Oral History Office

The Bancroft Library
Berkeley, California
May 1998

Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name JAMES EDWARD JONAS
 Date of birth 11/31/38 Birthplace SANTA ROSA, Calif.
 Father's full name JACK B. JONAS
 Occupation fuel Distributor Birthplace Occidental, Calif.
 Mother's full name SYLVIA JONAS
 Occupation Housewife Birthplace DENVER, COLO.
 Your spouse GAIL R. JONAS
 Occupation Registered Nurse (Retired) Birthplace OAKLAND, Calif.
 Your children ROBBIN K. KROOK, RUSSELL J. JONAS

Where did you grow up? Primarily in Clearlake, Calif.

Present community CLEARLAKE OAKS, Calif.

Education LOWER LAKE HIGH SCHOOL, UNIVERSITY OF
Calif - Berkeley

Occupation(s) PETROLEUM PRODUCTS DISTRIBUTOR

Areas of expertise JACK OF ALL TRADES

Other interests or activities TRAVEL, FISHING, BOATING

Organizations in which you are active LIONS CLUB - ALSO member of
ELKS, EAGLES, Chamber of Commerce, Native Sons of the
GOLDEN WEST, Clearlake Oaks/Glenhaven Business Association,

INTERVIEW WITH JAMES JONAS

JAMES JONAS, LAKE COUNTY FUEL DISTRIBUTOR

Family Roots in Occidental, California

[Interview 1: December 10, 1997] ##¹

Swent: I'd like to begin by having you tell where you were born and when.

Jonas: January 31, 1938, Santa Rosa, California, USA.

Swent: Just over the hill from here. What was your father doing at that point?

Jonas: He was what they call a resident manager for the Union Oil Company of California, managing their bulk plant, or marketing facility, in Calistoga, California.

Swent: Calistoga is just over another hill from here.

Jonas: Correct. There was no hospital facility in Calistoga; that's why I was born in Santa Rosa, plus the fact that my father and mother both came out of the Santa Rosa area originally so they were familiar with that country.

Swent: So your family has been here for a long, long time, haven't they?

Jonas: Well, my father was born in Occidental in 1907; my mother was born in Colorado a few years after that but both of them went through high school in the Santa Rosa area and what not.

Swent: What brought your grandfather out here, or your grandfathers, both of them?

¹## This symbol indicates that a tape or a tape segment has begun or ended. A guide to the tapes follows the transcripts.

Jonas: Oh, boy, well, my father's father died in 1907; my father never knew him. He was a teamster in Occidental, had a wagon and a team of horses, and hauled lumber and general freight and that type of thing. I'm not quite sure of the history but I'm pretty sure that he came around the Horn somewhere in the mid-to-late 1800s, so probably after the Civil War, I'm not quite sure. I don't have the genealogy right on hand here but that's basically it.

My mother's father came from Ohio, I believe Cleveland, and moved to Colorado, and then subsequently to California and was in the car business. He sold Lincolns back in the twenties and thirties. So that's sort of how that happened.

Swent: That's interesting.

Jonas: Yes, there's a lot of history there. As a matter of fact, we had our Thanksgiving dinner at the Union Hotel in Occidental because it has been a family tradition to go there. I don't know how much you want to talk about that; it really doesn't have much to do with mining in California.

Swent: No, but we're after community and California history too. Occidental in 1907 must have been really something.

Jonas: Yes, I'm sure it was, but that's a little before my time. My father was just about the youngest of seven or eight children and one of his sisters was twenty-three years older, that worked in the general store in Occidental so their history in that area really goes back. As a matter of fact, I've got an Italian friend of mine in this community who has friends and family in Occidental and he was shocked to find out that an Englishman had started the first cherry orchard over there and not an Italian. And actually, that's true; the Jonas family had the first cherries, which used to be pretty prevalent in that area before wine grapes and everything kind of took over.

Swent: So they had come from England?

Jonas: My grandfather came from England. My grandmother, his wife, I'm not sure of her origins. Her family was all from Occidental; she may have been born out here in the West, but I can't remember for sure. I'm ashamed of myself that I don't have that down. My mother has all that down in the family Bible at home, but I haven't memorized it all yet.

Swent: She's still alive?

Jonas: Oh, sure, yes.

Swent: Where does she live?

Jonas: She lives right in the city of Clearlake, right out here. She's in her eighties, but she plays bridge every day, and is active in the Park Study Club, and the Republican Women's Club, and the Soroptimists, and there is something going on all the time.

Swent: Good for her; that's wonderful.

Jonas: Yes, she's very active. My father passed on in '88.

Bulk Plants "Part of the Family from the Word Go"

Swent: Not so very long ago. And your father was already in the same business that you're in now--was he in it when you were born?

Jonas: Yes, and I worked with him when I was in high school, but I didn't come back to take over this until 1970 when he had a stroke.

Swent: But you must have had some acquaintance with it as a child?

Jonas: Oh, certainly, I used to drive the old fuel truck when I was just out of high school. So, yes, it has been part of the family from the word go.

Swent: You said you spent your early years in Calistoga, but then you moved to Soledad?

Jonas: Well, yes. I was born--when we lived in Calistoga, he ran the bulk plant there for Union Oil--in those days they used to be company employees, resident managers; they weren't independent businessmen. Then he was transferred to Soledad, probably around 1940, '41, around when the war started. I think we moved from there to Pittsburg, California, where he took over another Unocal bulk plant or Union Oil Company bulk plant somewhere around 1944 I would think. Then subsequently, in 1947, he came back up to Lower Lake to take over this plant.

Swent: Do you have any recollections of Pittsburg in those years?

Jonas: Yes, they're kind of vague and spotty. I can remember Camp Stoneman and the troop trains where we lived right across the field, where the troop trains would come in and we would go over and talk to the troops that were waiting to get off the train. There were a lot of steel mills and a lot of industrial activity around here. Like I say, I started--did I start there? I

probably started grammar school in Soledad but I went to about the fourth grade I guess in Pittsburg so I remember a little bit about the schools, but not a great deal; I was pretty young. As I say, we came up here when I was nine, so most of my recollection is of Lake County.

Changes in Bulk Plant Managing Since 1947: from Employee to Owner

Swent: You said your father was a Unocal employee?

Jonas: Yes, the Union Oil Company of California they used to call it in those days; later it was called Unocal.

Swent: You implied that that arrangement had changed since then.

Jonas: I don't know if that has a whole lot of bearing on the whole story. Up until 1947, all of the people that ran the Union Oil bulk plants were just strictly company employees; they were managers, per se, of the plant. Then after the war they started changing these guys to commissions agents, where the company would own the plant, and the facility, and the products in it, and they would pay the operators so much a gallon to do it, rather than having them on a salary, or hourly.

Later on, in the eighties, they finally converted us over to where we were strictly jobbers; we bought and resold products, owned the inventory, and gradually we're buying the facilities. Although I still rent this land from--well, it isn't Unocal anymore; it's Tosco has bought Union Oil, or whatever, the 76 brand. It's kind of a long story, but at this point in time we own all the inventory, we own all of the trucks and equipment, we hire all of the people, we have the risk of the operation.

The only thing that's left here that's major-refiner-owned is the ground we sit on and that's only because we don't want to buy it because it probably has hydrocarbons in the soil down to China. So we don't want to accept that responsibility. Although there are things going on right now where we might, if we get the right indemnifications from the former owner and all that sort of thing.

Swent: That could be a nightmare, though, couldn't it?

Jonas: Oh, it sure can; this is another story that's not related to mining or the history of the area--well, it is in a sense.

Soil Cleanup: "Environmental Overkill"

Swent: Well, it's a change in the world, though.

Jonas: Yes. We have property down on the corner here that Caltrans just took over. It used to be an old service station that I owned and right now the cleanup on that is at about a quarter of a million dollars, and I could go on all day about why that shouldn't be. It really wasn't impacting any wells off the property and that type of thing, but it's just a little bit of environmental overkill. But getting back to this plant, that would make that look pale.

Swent: Sure, yes. Are you held liable for that?

Jonas: Well, there is an underground tank fund that's funded by all operators of underground tanks; we pay so much a gallon for all our sales to the state. So this insurance fund has paid most of that, about \$210,000.00, but I've paid forty or fifty thousand personally. It's not done yet; we've got monitor wells down there and nobody will ever sign off on something until it's--. Oh, well, there's no point in going into it; we could go on for the next two hours just on that subject alone.

Swent: That's an important thing to get in the picture though.

Jonas: You talk about the community, every little person that owns what we call a mom-and-pop station, a bait store with a gas pump out front, or the resort, or whatever, in 1998, all these tanks have to brought up to code. It's a really difficult situation because they can't afford, most of them are not at high enough volume to spend a hundred, hundred fifty thousand putting in new equipment.

Yet when they take them out they are subject to analysis, soil analysis, all this sort of thing; it's going to cost them, even if they don't have a pollution problem, probably the average guy with a couple of thousand-gallon tanks, ten thousand, twelve, fifteen thousand just to get rid of them if they're lucky, if they don't have a pollution problem. Then they've got to go to the underground tank fund, which is a \$5,000 deductible, but it's a bureaucratic nightmare to get on the program.

It's not a happy time for people like that, or somebody that inherits some property. Somebody hangs on to one of these places that's had these fuel tanks and pumps forever and they die, and then somebody in Los Angeles says, "Hey, grandpa passed away. Now I have this beach front property, whoopee." Next thing they know, they've got monumental liability to get rid of these tanks. The

whole thing has been rather mismanaged, but there again, I get on this subject, I get a little rabid so I'll back off of that.

Swent: Well, it's good to get on the record just the same because it's something that is happening right now.

Jonas: Not that I'm not---. I definitely like the environment, I love the whole thing. People think of people like myself in this business running around as gross polluters; that's not the case. My whole objection to it is the overreaction to the thing when it's really not causing a problem say off of this property. In ten or fifteen years, or twenty, it would biodegrade, as long as it's not impacting some wells or whatever. Why spend half a million dollars and drive somebody to drink, or to death, or whatever, over this whole thing, and that's just it.

Clearlake Highlands Schools, 1947 to 1955

Swent: So you came here in '47 and started to school. Was this little school up here going then?

Jonas: Well, actually, we lived out where the city of Clearlake is now; at that time it was called Clearlake Highlands; we still refer to it as the Highlands. I went to what was called Burns Valley Elementary School district, or Burns Valley grammar school, which is now a part of the whole unified thing, you know, Lower Lake, Clearlake Oaks, whatever, but that's where I went to grammar school.

Swent: What was it like?

Jonas: Well, what was it like? I don't know, it was a small school. Some of the classes, I don't remember what the total enrollment was, but sixth and seventh grades were together; you know that type of thing, fourth and fifth. I don't know if they had kindergarten or not, but the first grade through eighth. Then, when you got to eighth grade, you went to Lower Lake High School. I do know that when I graduated from high school, in 1955, there was only 125 students. I think our graduating class was like twenty-five to twenty-seven, somewhere around there. So I would suspect that probably the Burns Valley school was, I don't know, probably 100 kids or whatever.

Swent: All women teachers, I suppose?

Jonas: No, most of them were in grammar school, but there was one young man, I remember, that we drove crazy and he left. High school had a number of male teachers at that time. I can't say, but there was probably fifty-fifty male and females in high school. Most of the elementary school teachers were women, yes.

Swent: Are there any teachers you particularly remember that had an influence on you?

Jonas: Oh, boy, you're talking about grammar school?

Swent: Any of them.

Jonas: Any of them. Well, there was a lady by the name of Victoria Ross who I was very fond of. She had a resort close to where we lived. Mary Hale, she's a person that you'll turn up probably hearing about quite a bit. She was the principal, her husband was the-- they called him constable or the deputy sheriff at the time. She had the eighth grade and ran the school with an iron hand; she was a good lady and I remember her quite well. Those two probably are standouts for the grammar school thing; there's a number of others.

Charles Barber, Influential Teacher and Principal

Swent: What about high school?

Jonas: Oh, high school, yes. A fellow named Charles Barber probably had the biggest influence on my whole thing. He was the principal and was probably--. You know normally I think because smaller country schools had people who were probably not near as well-credentialed as he was. He was a meteorologist and really strong in the sciences, and he taught physics, and chemistry, and things like that that gave us grounding in sciences. Then we had a pretty strong math program too. You were either college prep, or you were kind of general, or business; that was your kind of a deal. I was in the college prep thing. There was about thirteen of us and Mr. Barber took us under his wing and really tutored us.

When I went to UC Berkeley, and then like on the testing and all that type of thing, I was way ahead on the sciences and what not, woefully lacking in English. We had bonehead English. He probably had one of the bigger influences on us. He gave us a really good grounding, educational background that probably was a little more than you would suspect from a small country school.

Clean Fun and Houses Left Unlocked

Swent: What sorts of things did you do for fun?

Jonas: I just don't know that I want to tell you about that. [laughter] I was involved in more music than in sports. We had a band; we had dances.

Swent: What did you play?

Jonas: Trombone. We had a little dance band; we had dances at the high school. In the summertime up here, this being a tourist attraction, you know out in the city of Clearlake, there was a dance hall, and there was a roller skating rink, and water sports and things like that.

The wintertime mostly was centered around school activities. I think we had one theater; we had a movie theater here in the town of Lower Lake, but that was kind of a hassle to get to; we'd go to the movies. No television to speak of here in those days. You know, you'd visit one another. I don't know, we always seemed busy. I have a hard time with the kids today that say that they just can't find anything to do. They ought to have been sitting in Lake County fifty years ago, or whenever it was; you made your own fun.

Swent: Were the high school kids drinking, or smoking, or doing drugs?

Jonas: Well, there was a little bit of beer every once in a while; no drugs, I never heard of--. When I was in the University of California at Berkeley, the first couple of years, I lived with my grandmother so I was a little bit sheltered. But later on, I was in a fraternity, which pretty much led to my demise as a student, and there was beer drinking and all that type thing, but I don't recall ever running across anybody smoking marijuana, or doing drugs, or anything, and that was in the mid to late fifties. In Lake County, there was some beer, but certainly no drugs that I knew of and I was out there, let me tell you.

We had cars; we would drive all around the lake and visit and mess around. Like you say, it's Lucky Lager dance time and on the radio out at the sand pits or something, that was a high old time. But, to my way of thinking, clean fun. There wasn't any thievery, or vandalism, or things like that. I'd say that probably the raciest thing we would do was haul a car body down the street upside down on Halloween, which today would probably get you in jail, so I don't know if that would--. But it wasn't something you left in somebody's front yard, or destroyed things; it was a

little different. You used to leave your house unlocked and the keys in the car, and even if you went away for two weeks, just in case somebody needed something. You definitely don't do that today; there are bars and security systems, even up here, unfortunately.

Working at a Print Shop from Age Thirteen

Swent: Were you helping your dad at all; did you work vacations?

Jonas: Well, when I was in high school I worked as a printer. I started working for a local print shop when I was thirteen, and they produced a little newspaper; it was tabloid size at first.

Swent: Is this the Hanchetts?

Jonas: No, the Hanchetts were competition. Hanchetts had the Clearlake Observer which is still their name; the Record-Bee has taken it over now. Were the Hachetts here yet? Yes, I guess they were. They were just kind of starting. They had bought out the Whites who owned the Observer; I can't remember what year that would have been, but there was Carol White and Leo White I think owned the Clearlake Observer and then Ross Hanchett and Bonnie bought them out and they were running this.

But this was a fellow by the name of Ivan and Betty Glendinning. They came up here; he was a printer in the Los Angeles area and I guess somewhere probably around the early '50s bought this little job shop.

He had a Kluge, I can't remember the dimensions, but a little hand press that makes business cards, and then you had a larger Kluge platin press that we hand-fed this tabloid-size little newspaper. He had an old linotype, but I would hand set--well, at first he did it; he taught me how to do it. In later years, we finally got to where we had a bed press, a Kelly press, you know, with the forms and what not. He would sit at the linotype and set the newsprint and I would hand set all the heads like Cooper type, and I've forgotten the type faces, Bodoni, Cooper.

Swent: Bodoni is the only one I know.

Jonas: Yes, and all that sort of stuff, and we'd hand set it and settle them in the frame and lock the stuff up. I did all the makeup work. We poured things that people don't even think of today.

Like a picture was a halftone, they called it a halftone cut, I think. You're really making me dig back now. [laughter]

We poured lead in the form, in what they called a mat and made this block of lead with this half-tone texture on the top and put it in the, what did you call it? Lock up the frame, that's not the word. But anyway, you had a steel frame and you put all the type columns in rows and put sticks in between them to keep the type rows separate, and then the heads, and spaces, and then set the block of picture in there and then we'd run it.

First, we'd do this on like a snapper Kluge hand press, the larger one; then we'd run it on this Kelly bed press. It took us a long time to figure out how to do that; that's another whole story because it wasn't made to put floppy newsprint in there; it was made for job work with heavier paper. We had paper, and ink, and type flying all over that place until we finally figured out how to do it. I worked for him for most all of high school.

Swent: What did he pay you?

Jonas: I started out at fifty cents an hour and when I got done I was making about two bucks an hour, which was big money in 1954 or '55. I was living at home; my folks were paying all the bills, you know. I had all this spending money. I had a 1940 Buick Century, and pocket money; I was in good shape.

You asked about my father: I guess when I went away for college, when I would come home summers, I didn't work for Ivan any more; I drove for dad. But during high school, I was a printer. That was a real educational thing; of course it doesn't stand you in good stead now, with everything being photography and litho. I don't think they even do litho anymore. It's a whole different world: paste it up and shoot it. Anybody can do that, but not too many people could; to print letterheads and envelopes was quite a little art. You had to cut all those--. It's a long story. But anyway, it was educational and a lot of fun.

We finally graduated to a big old, I don't think he called it a web press, but it was a newsprint-type, a big huge old thing that was probably built in 1900 that you would hand-feed four pages at a time in; I can't think of the name of that thing.

Swent: There is something called a web press.

Jonas: Well, a web, though, is for like a regular newspaper that has got a bank and drums and this continuous feed of paper that's going through there. Ours was hand-fed. It was a big old drum for the platin and the bed was--. Well, anyway.

After that, though, I did work summers for my father driving the gas truck.

Swent: Do you have brothers and sisters?

Jonas: I have a younger brother, Richard. He resides in Sonoma; he's three years younger than I am. He too drove for dad a little bit in high school years, but he has never been involved in the business since.

Student at UC Berkeley, 1955 to 1959

Swent: So you graduated from high school and then you went down to Berkeley and lived with your grandmother in Berkeley?

Jonas: Yes. My mother's mother and father.

Swent: Do you want to give their names?

Jonas: Sure, Ted and Vera Marihugh. They lived on Grant Street in Berkeley. At the time, he was a salesman for AAA Insurance, and of course, she had been a housewife all of her life; she had never held a job that I knew of. I lived with them for a couple of years; then I went up and joined the Del Rey fraternity up on Euclid Avenue. It's defunct now, but there still is a Del Rey group that meets. The house has been sold and what not but they still have a scholarship fund and that type of thing. That was one of only two or three independent, local fraternities.

Swent: Were high school friends of yours in it too?

Jonas: Yes, that's what got me up there. A couple of fellows that graduated from here that were about a year ahead of me were up in the fraternity so I went up and joined. We went along a couple of years that way and then I dropped out of college.

Swent: You were studying business, you said?

Jonas: Yes, I was in upper division business administration. But we subsequently dropped out short of a degree. What did we do then? One summer, while I was in college, I drove a beer truck up here. I'm trying to remember the progression here; Alzheimer's is setting in here.

##

Swent: What kind of beer?

Jonas: In those days it was like Schlitz. I worked for a distributor up here and he had Burgermeister primarily, which used to be a pretty big brand on the West Coast. We had Schlitz and Budweiser, I believe at that time. I worked summers doing that.

Bank of America Trainee

Jonas: After I dropped out of school, I went to work for the Bank of America on a training program. I was going to be the president within a year or two.

Swent: Of course; why not?

Jonas: Yes. We worked at various branches around the Bay Area, but primarily at 23rd and East 14th Street in Oakland, the Bank of America branch.

Swent: Is that in the Fruitvale District?

Jonas: It could be, I guess, but it would be down the hill a ways from what they really call Fruitvale. Fruitvale was up on--was it Seminary? I don't remember, but 23rd and East 14th were pretty rough down there even in those days. I worked at that branch for a while.

Swent: What were you doing?

Jonas: Well, as I say, I was in the training program, but I was pretty much a teller, a vault teller. We were supposedly training to become management, type of deal. After a couple of years of that at \$300 a month with a wife and a young child--

Swent: Oh, you were married at that time?

Jonas: Yes, we got married in 1960. This wasn't working too well from the financial side, plus I kind of missed Lake County so I came back up here and took over the beer distributorship as a manager. Manager, big deal, it was myself and one other guy distributing beer around the Lake County area.

Wife, Gail Denner Jonas

Swent: Was your wife from here also?

Jonas: Yes, my wife was raised in Clearlake Oaks. She was somewhat like myself; her parents came out of the Bay Area. Her dad was born in, I think, Ohio also, but they had been living in the Bay Area. They came up here during the war, or late in the war and lived in Clearlake Oaks. She went through the local school system, Eastlake Elementary School, which is Clearlake Oaks, and then to Lower Lake High School, same class as myself.

Swent: Were you high school sweethearts?

Jonas: No, not really. We were going with other people in those days. We didn't really get together romantically until after we were out of high school.

Swent: What was her name?

Jonas: Gail R. Jonas. It used to be Gail R. Denner. Her parents, Carl and Florence Denner--Carl was a butcher for Santa Fe Railroad in the Oakland area. Her mother worked in the shipyards during the war. Then they moved to Clearlake Oaks in, I think, '44, '45. And they built a bar and restaurant called the Oaks Corral, which was very well known around here for a number of years that they subsequently sold about the time Gail and I got married. We're living in their house that they built over in Clearlake Oaks right now. Anyway, I've known Gail all along.

Where were we? Oh, we were at the bank, and then we came up here and I was running a beer distributorship, right?

Beer Distributor and District Sales Manager

Swent: Yes, that's right.

Jonas: For somebody else; Ray Cavasnero out of Napa owned it, and that was called El Ray distributing; it still is; that was R-a-y for Ray Cavasnero. In 1963, I was approached by a district sales manager from Schlitz Brewing Company who was a representative that called on us up here because we had the Schlitz beer. He said that he was being promoted and they were looking for somebody to be a district sales manager in the North Coast area. It was about 108 degrees on a July day; I was wheeling beer back in the

supermarket up in Lakeport; I said, "You're on; it sounds like a good idea to me." So I went to work for them.

Swent: Did you have to move then?

Jonas: Yes, we moved to Santa Rosa in 1963 and lived out on the Fulton Road and River Road area, north of Santa Rosa. I traveled from Marin County to the Oregon border, all the beer distributors that handled Schlitz up and down the coast. Then we were transferred from there to Fresno in about, I think, 1966. I did the same thing in the San Joaquin Valley from Hanford to, I guess, Modesto was the northern boundaries. Then I transferred over to Livermore and moved to Livermore in about '68, I guess, somewhere around there. Then I became what they called the draft beer specialist for five Western states for Schlitz and ran around and taught people how to deal with beer systems and things like that, and supposedly how to sell it.

Swent: And this was actually the bottling of it?

Jonas: No, it was more a marketing thing. I would call on--.

Swent: Draft beer you don't bottle; that's it?

Jonas: Well, it's in a keg. Typically, in a fifteen-and-a-half-gallon barrel, beer barrel. We call them kegs. You have a mechanical system to dispense this stuff, which can get pretty involved, like if you have a refrigeration source in a basement someplace, like you might have at ski resort or a casino in Reno and you pipe the beer up two floors to a dispensing thing at a bar dispensing area, you have got to make sure that everything is refrigerated constantly from the top to the bottom, and check pressures and line resistance and things like that.

So I was involved in that, and then also the presentation of beer, and what type of glasses, and how you clean the glassware, and the shape of the glass has a lot to do with profitability, and blah, blah, blah, blah, blah. Well, that was my thing for a few years until--. And calling on national accounts like the Coliseum, concessionaires, and fairs and all that kind of thing.

Swent: For five states, you said? What were they?

Jonas: Oh boy, well, I didn't go to the rest of them very often. I was mostly in California, but California, Oregon, Washington, Idaho, and Montana. No wait, I forgot Nevada. California, Nevada--I was in Nevada a lot--Oregon, Washington, and I think like Idaho, and I never did go there.

Swent: That's a lot of beer.

Jonas: Yes, yes, it was kind of fun. But by that time, I had been on the road a lot; you're on the road a lot. By that time, we had two children and I conveniently took off and left while she was raising them, you know, on the road, which wasn't setting too well with her. I mean we always got along fine, but it was not a very fair situation. She was working too part-time; she's a registered nurse. When dad had a stroke in 1970, I was ready to do something else anyway.

Lower Lake in 1970: Tourism and Agriculture

Jonas: So I came up here and took over this little rinky-dink plant and his 1948 gas truck, and I was just as happy as a clam to do that, which led into dealing with the likes of Bill Wilder and Morgan North in the quicksilver mines.

Swent: In 1970, what was going on around here? The tourist business was still big, was it?

Jonas: Well, you know when you start talking about the tourist business being big and little, the tourist business at that time was a much bigger percentage of what was going on because there wasn't anything else going on. I mean, you had agriculture. I remember a population figure in 1972, or '73; '72, because we were going through fuel allocations and I was trying to get more fuel out of the state set-aside and blah, blah, but there were around 13,000 people in the county at the time.

So when you had the summer influx, it was really noticeable. I mean you went from, you know, in the middle of the winter you could shoot a cannon off down the street and not hit anybody. In the summer, there were people walking, and particularly in a town like Clearlake Highlands or Lakeport, people strolling the boulevard, a lot of people around. Tourism was a much bigger part of the action.

Like up in the mountain, Cobb Mountain up here where Hoberg's, and Forest Lake, and Seigler Springs, and Adam Springs, all of those were going resort facilities. Every summer people would be all over that mountain up there. Like Hoberg's for example; you ask me what we did for recreation, they had an open air dance floor with big bands up there every night. It's a wonder I survived, I was up there every night in the summertime.

So anyway, yes, tourism was big. And of course, agriculture was probably, I don't know, I haven't looked at the numbers for those years, but pears and walnuts--grapes weren't much in those days, but pears and walnuts was a big part of the economy here. So I'd say agriculture and tourism was about it.

The Impact of The Geysers Power Development

Jonas: Except that at that time, the Geysers was just starting to impact Lake County. Because when I first came back here I know we were hauling oil to drilling rigs; they were starting to drill. But on the other side of the hill, on the Sonoma County side, where Union Oil had leases and they had that going for five, or six, or seven, or eight years prior to that.

So there was more activity on the other side, but that didn't really impact us much over here because the access for workers from here to there was very poor. It wasn't until the '70s--I can't remember when they finally opened the road which they call Sawmill Road out of the Cobb Mountain area or near the town of Cobb, that went up and over the hill into the Unocal, or Union Oil, Geysers area. Then they started developing this side.

The Geysers started mostly in the Socrates Mine area out of Middletown because that's where the first drilling on the Lake County side was really much going on. Unocal was doing some in Lake County up on the top there, but we couldn't get to it from this side. So from my business standpoint and probably most of the economy here, it had really had very little to do with it until everything really got rolling up around the Middletown area. Then, you know, in the early '70s it just kind of got bigger and bigger.

You had a lot of contractors up there building roads and pads for power plants and pads for drilling rigs. These drilling rigs that drill for steam are oil rigs, they're big, and to get them up those mountain roads they had to improve the roads and make a good pad for them. We hauled fuel to all these guys that were doing the construction.

Swent: What kind of fuel was it?

Jonas: Diesel fuel, primarily, for tractors, excavating equipment, the drilling rigs. We provided a lot of lubrications, lubricating oils and greases, some fuel. There was a lot of fuel being burned up there in those rigs, but we were not hauling too much of that,

but we did take care of an awful lot of the construction that went on up there. And they were building power plants, one right after the other and there was some fuel involved with that. There was a lot of people employed in the county working up there.

Swent: They were buying your gas for their cars, I suppose?

Jonas: Yes, that's right. In those days, we had more of a retail presence. We talked earlier about environmental impacts and what not, but in those days there was a service station on every corner and we probably had about twenty branded 76 stations around the county, and we don't have hardly any any more. In those days, there was a lot of people working in the Geysers so that was a big boost to the economy.

Taking Over the Bulk Plant: One Delivery Truck

Swent: Let's get some detail on your business. Where did you get the fuel from, and how did you get it here?

Jonas: Well, here we sit in a place that has about 100,000 gallons of above-ground storage, large fuel tanks here, and a loading rack where we can load our smaller trucks. The fuel that we receive, in those days anyway, was largely trucked in from Richmond, you know the terminals down there, Unocal's or Union Oil's terminal. They would truck the fuel up here to us, gasoline, diesel, and pump it into our tanks and we in turn load our trucks here and distribute it out around the county.

Swent: You said your dad just had a few little trucks?

Jonas: Yes, in the early days when I came up here in 1970, he only had one delivery truck, which was a 1948 Chevrolet that held 1,150 gallons. It was the same truck that I was driving when I was seventeen or eighteen years old. I came back up, what is that, twenty-seven years? I'm sixty almost now so I was thirty plus and he still had that same truck, which served him well.

Swent: How many tanks did he have?

Jonas: Well, it wasn't quite as large. He probably had 60,000 storage. We've added some tanks to it, not too many though actually, 40,000; yes, he probably had about 60,000-gallon storage.

Swent: And just one truck?

Jonas: One truck, and he had one part-time driver, and that's why I came back up here, because he had always been hale and hearty and all of a sudden, boom, he was paralyzed, which he subsequently recovered pretty much from that. But at the time, he just had a part-time driver who knew nothing about the bookkeeping or the whatever. We would have lost the distributorship without--. The oil company wouldn't allow this to continue unless somebody fairly capable was taking over.

Swent: So you were supplying the local filling stations, service stations?

Jonas: Yes, typically, stations even in those days, say in the Bay Area, would be directly supplied by the oil company, but in the rural areas where the stations were smaller and the storage was smaller, they wouldn't deliver them direct from, say, Richmond up here because they'd have to take 8,000 gallons at a time and full truck and trailer. Most of these little stations didn't have that kind of storage, so we took care of them.

Swent: I see; so then you dealt directly with people like the drilling rigs?

Jonas: Sure, we had our clientele in those days [that] were farmers, you know, that have a 500-gallon tank out in their farm yard somewhere, or these contractors that would be up on a job with an old fuel truck or we would put tanks out there for them, deliver it directly into their construction equipment. So we had that type of business.

Swent: Was this mostly done by contracts?

Jonas: No, not too much of it is contracts, legal binding contracts, it's just a situation where you go out and solicit somebody's business and they decide to buy from you and that's it, you know. For example, there was a construction company up there that did an awful lot of that work in the Geysers by the name of Smith and Breazeale and I knew these two individuals and they liked us, and we liked them, and they decided to buy from us.

So there's no binding contract. Anybody can switch or change any time they want, and it's a very competitive business; there's more, I'm not the only one around. So there's always a lot of competition to keep these customers whether they be retail establishments, or agriculture farmers, or construction people, or whatever. You obtain their business by having a competitive price, and good service, and dependability and that type of thing, and a good product.

Civic Activities and Director of the Fire Board

Swent: Did you join the local Chamber of Commerce and those kinds of things?

Jonas: Oh boy, we've been in everything there is to be in I think. Well, right away after coming back, I got back in the Lions Club. I've been in the Lakeshore Lions Club forever. They talked me into joining the local volunteer fire department in Lower Lake. I was a volunteer fire man for twenty-some-odd years; I retired a few years ago. Then I got elected as a director in the fire district, on the board of directors of the Fire Board, an elected position for probably seventeen, eighteen years, something like that.

Swent: That's a big responsibility.

Jonas: Well, yes, you know, it wasn't exactly like trying to run the San Francisco Fire District, but it's a little different. We did see it through a lot of development over the years. Of course, we've always been in the Chamber of Commerce, not really tremendously active there, but we pay the dues and do all that type of thing, in the local Elks Club, and a number of other things.

Mother's Business: Milvia's Department Store

Swent: You mentioned that your mother was in the Soroptimists.

Jonas: Yes.

Swent: Had she been part of the business too?

Jonas: No, she never really participated in the business other than putting up with my dad and myself all these years.

Swent: She wasn't the bookkeeper?

Jonas: She wasn't the bookkeeper or that type of thing. She had her own business; she had a dry goods store, or department store I guess you'd call it, a small one for many years out in the city of Clearlake all through when I was going through high school, and college, and later. It was just a little apparel shop, called Milvia's. Her name is Sylvia, but she had a partner by the name of Mildred Conlon so they put the names together and it was Milvia's Department Store, and it was out there for years and years.

Swent: Your wife and children, where were they living when you were traveling for Schlitz? You had been in Livermore; did you stay there in Livermore?

Jonas: You mean when I came back up here?

Swent: No, when you had this big five-state district.

Jonas: They lived in Livermore at the home we bought in Livermore and the same with Fresno, the same with Santa Rosa.

Swent: So you came from Livermore up here when your dad has his stroke?

Jonas: We came up and bought a house in Lower Lake here and lived in Lower Lake here for, I think, seventeen years until about ten years ago my wife's father died. He and his wife lived over in Clearlake Oaks, this house they built in the '40s, and left her there and she needed some assistance so we moved over there and sold our place in Lower Lake. So we've been over in Clearlake Oaks for about the last 10 years.

Expanding into Heating and Air-Conditioning

Swent: So you built up your dad's business to bigger than what it was when you took it over.

Jonas: Yes, I'm not so sure that was really wise. Right now, currently, I think we have about nineteen employees. My son just walked in here a few minutes ago; he runs our heating and air conditioning business. We've got, for heating and air conditioning, contractors who sell a lot of oil heating systems, and air conditioning things.

Swent: When did you add that on?

Jonas: Well, to digress a little bit, in a county like Lake County, where there's no natural gas, oil heat has been around for a long time. You either heat with oil, propane, electric, or wood; there's some solar and that type of thing. Most of it's electric or propane, but there has always been a bunch of oil heaters; there used to be a lot of them years and years ago, and they kind of died out because the technology was outdated. We finally decided because about four or five years ago-- maybe a little longer than that now, six, seven years ago--that we were losing all of this retail type business.

We could see that the mine was at a finite life, the Geysers was doing a nose dive, we had better come up with something--and the retail side of the business was all going to very large multi-branded jobbers. Because in order to have a successful retail establishment any more you've got to spend a couple million dollars putting up a convenience store, car wash, you know, whatever. It's wrought with competitive problems, so I said, "We better find another niche here."

Our oil business was going down the tubes. The heating oil was dropping because every thing out there was an old oil stove that belched soot all over the house every once in a while, or antiquated burners from the thirties and that type of thing, and there was nobody here to service them. We were delivering oil to these people, but there was less and less every year. So my son and I went out and looked for some assistance and we wound up in Oregon going to school. Oregon, Washington, has a lot of oil heat and they have technical expertise in marketing associations and what not.

So we went up and joined the Oregon Heating Institute and went to school a little bit. We learned enough to be dangerous and came back and started pushing oil heat and that led to having about three or four vans and six or seven people just working in that division, which is in another area--they're not here-- and got a contractors license.

We're putting in two or three oil heating systems a day now. Our whole business of delivery and what not, like right now I've got--this is kind of confidential trade stuff, but it's not really that big of a secret--that we've got, I think, three or four drivers out there doing nothing but delivering heating oil right now; whereas, ten years ago, our thing would have been Homestake Mining, Geysers, some commercial stuff, retail, and in the winter you'd struggle along, there wasn't much going on, in the summer you'd go like mad. Now it's the other way around: the summers are not that big a deal for us and winter is go, go, go. Although we're busy throughout the summer too. We looked for different things to replace that type of business that's no longer here.

Bill Wilder and the One Shot Mine in 1970

Swent: We had better loop back now. You mentioned Homestake and we haven't even gotten Homestake in the picture yet. You had said that when you came back in 1970, or the early seventies, that the

Geysers, and agriculture, and your retail business--were there also mining customers?

Jonas: Yes, there wasn't anything like what we wound up with. There was, you know, like Bill Wilder was out at the One Shot Mine, and we'd haul a load or two; he was a pretty good customer.

Swent: Let's talk about Bill.

Jonas: Okay. Go ahead, or do you want me to just rattle on?

Swent: You talk about Bill. [laughter]

Jonas: Well, you know, they were out there running the One Shot Mine and that was--he'd kill me if he heard me say this--from an environmental standpoint by today's standards, they would have never existed in those days, you know, condensing towers, and mercury fumes, and all that kind of stuff. I can recall being out there delivering fuel to this tank right underneath the condensing towers and if the wind happen to hit it wrong in the wintertime, you'd be engulfed in a cloud of vapor off the top of those things and it could choke a horse.

Although I've known and knew a lot of quicksilver miners and I don't think I've ever seen one that exhibited the old mad hatter type of thing that was supposed to happen to your nerves because of quicksilver. But I do know, it probably wouldn't be too healthy an environment to be breathing that for any long period of time. But anyway they were mining out there--.

Swent: How did you happen to start business with him?

Jonas: Well, my father had been delivering to him. First, you have to understand we're sitting here and that mine is about twenty miles up this road. The road that exists today that Homestake built is like a freeway. It's probably one of the best roads in Lake County even after all the traffic has gone over it in the last ten or twelve years. In those days, it was a dirt trail; I mean it would take you half a day to get out there, almost, particularly in the wintertime. So we were the natural ones to supply that.

Swent: And there was no telephone.

Jonas: There was a farm line.

Swent: When Homestake first went there, I think there was no phone.

Jonas: Well, I know they built their phone line, and then there was a farm line that ran through Morgan Valley; whether it made it all

the way out to One Shot or not, I can't remember now. But the farmers in Morgan Valley, which is between here and there, there were six or seven of them that had phones and they were all on the same lines and it was like "three rings and a whistle to get hold of Millie, and two to get Joe" type of thing. But I don't think that line went all the way out there. People were going back and forth all the time; I guess we had communication for orders and there might have been a radio or something. It wasn't too long after Homestake was out there that we could call out there and talk to them.

Swent: What were you taking out there, diesel fuel?

Jonas: Well, diesel fuel primarily, and motor oils, some gasoline, you know, because they had pickups and whatever. They had a diesel tank or two; and for their generators, because they generated all their own power; and for their excavating equipment to push the dirt around, and scoop shovels and that kind of thing.

Swent: How was Bill doing? Was he prosperous?

Jonas: He was struggling. I didn't get copies of his financial statements, but I know I had to be patient about getting paid from time to time, which was not an inordinate amount of time, and we always had a really good understanding there. He had several families living out there and working with him, and they had their own society out there, you might say. They were pretty much, I wouldn't say isolated; one lady brought her kids to school every day; that was quite a little deal. I don't think they were having--it wasn't very good times, for sure.

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Swent: I think we missed just a little bit there. You were saying that your dad was already doing business at the One Shot Mine.

Jonas: Yes, he had already been, I don't know how long Bill had been out there before, a few years I guess, and dad had been delivering to him so I just carried on with it.

Swent: You had not known him before?

Jonas: No, but we got along famously right from the start. He had been a contractor before in the Sunnyvale area, I guess, and he came up here. He had all these buses he bought from the transit company in Sunnyvale, or someplace down there, and they were loaded with spare parts. Bill can build a generator out of a bunch of wire and some bolts, whatever. So they struggled along out there, make shift, and made a lot of their own things, and were very creative,

so they kept their cost down I guess. Somehow, he struggled along.

I can recall him telling me back when it was still on the gold standard, \$32 an ounce, he said, "You know, Jim, we have gold and silver and all that in the tailings out here, or in the ore, but it's not of an amount that's feasible to mine under these prices." But the minute the gold went on a free-floating market, that was another story. He marketed that thing somehow to Homestake and I'm very happy to see Bill Wilder get that because he worked very hard for that.

He is a very intelligent guy; he knew his mining, knows his equipment. When it was time to sell that to Homestake, he got right on it, and it has worked extremely well for him. I've got all the records in here of all the original stuff, but it's somewhere around the early eighties Homestake started in there and it was around '83, '84 that they really got going. When they came to town at about that time, talking about the economy of Lake County, the development of the Geysers was pretty much peaking then.

Doing Business with Homestake: Rethinking Our Scale

Jonas: They had several thousand people working up there building power plants, and roads, and drilling rigs, and then you had 1,000 or 1,500, I don't know how many, maybe 2,000 at one time, employees out here building a road from here to--. Well, they first started core drilling out there, Homestake did, and we delivered to their core drilling operations, diesel fuel and gasoline; we had tanks out there. Then they brought in the heavy stuff; that was totally amazing. If I recall, they had two construction companies: McLaughlin Construction and ARGEE Construction were the two main ones. TIC out of Steamboat Springs was more of a fabricating outfit; they were another good-size outfit they had out there. That was all under the auspices of--. I'm trying to think of the name of that engineering firm, now.

Swent: Davy?

Jonas: Davy McKee, yes, that's it. They were coordinating the whole thing. One of the construction companies was taking off all the overburden out there getting ready to start the open pit and constructing the sites for the buildings, and the truck shop, and the process area. Another one was doing the road between here and there. The stuff they started bringing in, the size of the equipment, was immense compared to--we're used to a D-8 tractor

and a little paddle-wheel scraper or something to move a little dirt.

What they did is to bring them to town here and they go down the road about two or three miles and they take them off the low beds, and they came in pieces; they didn't come all put together, and they would put them together out here along side the road and then drive them out because the low bed trucks couldn't. The old road that went out there had so many tight turns and what not they couldn't take the stuff out by the road. They would drive the equipment out.

The first day they called me and they said, "Bring some fuel out here. You've got to fuel a couple scrapers." I said, "Okay." I had this little thirteen-hundred-gallon truck out here and I put about two or three hundred gallons, which I thought would be plenty. I got out there and I looked up at the tank and it was fifteen feet up there, and it's a five-hundred-gallon tank hanging on the side of this immense scraper that towers higher than my head. [laughter] I said, "I think it's time to rethink our scale here a little bit."

One time we were hauling--. I think we got up to twenty to thirty thousand gallons of diesel fuel a day. We were taking twenty, thirty, forty barrels of lubricants out there a week. It was just something; it was--. Our company probably was doing a total of 180,000 gallons a month, or something, or 200,000, I don't know; we might have been a little bit higher than that by then. Dad was doing about 170,000 to 180,000, and then we started bringing it up to 300,000. The next thing you know--.

A lot of that fuel was going out there direct-ship; that didn't come through the plant. We had a commission on it, but we were hauling a lot of it too. We were getting up to doing six and seven hundred thousand gallons a month right out of this plant, plus the stuff that went direct was a whole lot more. We're hiring people and we've got--. Our whole thing has changed. We probably went from two, or three, or four people to twelve to fifteen in a pretty rapid period of time.

Swent: Were you able to get them easily?

Jonas: Oh, it wasn't really any problem finding people. No offense to my employees, but it wasn't like we were going out looking for Ph.D.'s and rocket scientists, but people that could drive trucks and the clerical staff. We weren't in computer at the time; everything was manual so we didn't do our own general ledger and that type of thing so I didn't need graduate accountants.

Serving All of Lake County

Jonas: So really, the way this place developed was when I took over for my dad, it was just me and a part-time guy. Shortly thereafter, I bought out a Shell distributor that used to be down the street where the feed store is, Earl Weiper. In all these counties, Chevron, Shell, and Unocal used to have a bulk plant in every little town. In the late sixties and seventies, they started consolidating all that stuff. So Shell, instead of having two plants in Lake County, they got one.

The guy that lost on the deal was Earl, who was right in here in town, whom I knew very well and his wife Gwen. They left him high and dry so I bought his trucks and that's why I got out of the 1948 Chevy and graduated to the 1957 that's sitting out there. [laughter] He came to work for me and his wife is my bookkeeper.

Swent: So they already knew the business.

Jonas: Yes, better than I because I wa's Johnny-come-lately. In '73, there was a Union Oil plant in Lakeport that the guy retired so I wound up with--. In those days we only had half the county. Then I took over the Lakeport plant and got the employee that was working up there so now I had three drivers and myself, and plus Gwen, and two plants, and then they closed that plant so we ran everything out of here and that was kind of the end of the expansion. Then, over time I just hired one or two drivers here and there, and another gal to help Gwen, and now we've got another office--. Well, you saw what was going on in there.

Swent: Computers?

Jonas: Four or five of them, yes. Fax machines, computers, internet, Microsoft, Windows 95, you name it. Some days I think we were a lot better off when it was just a few of us around here. I could tell you that the net profit at the end of the year was just as good then, better than it is now and a lot less hassle, but that's life in the fast lane.

Morgan North and the Knoxville Mine

Swent: Yes. You mentioned the One Shot, but let's say a little bit about Knoxville.

Jonas: Well, at the time, the One Shot was running just down below it. Further into Napa County from this side, the Knoxville Mine, which was operated by a gentleman by the name of Morgan North. They processed over there for a few years; I can't recall when they quit, but it was probably mid-seventies, somewhere around there, maybe a little later.

Swent: Were you delivering to them as well?

Jonas: Oh yes, yes, we were. You asked me earlier--I don't know if we were on tape then or not--if there was any other activity going on. There were a couple of boys by the name of the Lansdowne brothers that opened the Helen Mine up out of Middletown. Virgil Lansdowne still lives in town here, and Earl his older brother, and he had another brother too named Roy, I think. They were old time Lake County residents out of Middletown. The Helen Mine, that's out of Middletown, up on a ridge in the Geysers area, and they tried to run that for a year or two, and didn't do a whole lot.

I'm trying to think of--. There was, in the early seventies, a fellow by the name of Albert Giumelli ran the Red Elephant for a while and that was out in the Homestake area; I guess it would be west of Morgan Valley Road out on the fire trail that we delivered to. I don't think anything much came of that, but they were out there for a year or two fooling around with it trying to make it work.

They were actively mining it. Then, Helen, like I say, they did that for a while. Great Western, they poked around a little bit up there. Oat Hill Mine ran for a little bit in the early seventies. They did some exploration out there. I don't know if they ever really ran any ore; that wasn't one of my accounts, but I was out there once or twice. But the early seventies was about the end of the cinnabar mercury mining thing. But in earlier days, that was obviously a big part of the action around here.

Swent: Yes, a hundred years ago, tremendous.

Jonas: Yes, 1898 and 1900, Lower Lake was a booming place because of that. So anyway, we switched off of that.

Swent: Tell a little bit more about the Knoxville because that was before we were on tape that you mentioned Morgan North. You did know him?

Jonas: Oh, I sure did, yes. We weren't close pals or anything, but he was a customer of mine and a real, true gentleman. As I mentioned earlier, I was kind of amazed when I went out and met him the

first time sitting on a huge excavator and he got off and talked to me for a while, and he sounded more like a university professor than a typical mining type of fellow. He was, as you know, involved in publishing and what not in Berkeley. He impressed me like this is his hobby, or he just really loved mining. The trouble was that was in an era when the environmental, and the pricing of ore, and everything was coming to a point where it was just impossible to make it with quicksilver.

I don't remember the economics of the whole thing totally, but I think Spanish and South American silver, as much as the market needed, they had it and it was cheaper and easier to produce, plus you didn't have to worry about the environmental concerns in those other countries to produce it.

Swent: You thought the pollution control was one of the--?

Jonas: Yes, I can remember Morgan telling me that the Bay Area Pollution Control District was coming down on him pretty hard about emissions; obviously, in the mining of quicksilver with condensing towers and that type of thing, and the rotary furnace application. Well, it would never fly today, for sure; some very expensive scrubbing type of stuff, but in those days you just let it fly; that was it.

Swent: All the buildings were still there then?

Jonas: Well, they had a big metal shop building. I don't think it's the original; obviously, the original buildings from the Knoxville at the turn of the century. Although there was the old Knoxville building alongside the road, the stage stop; I don't think it's there anymore.

Swent: There's nothing there now.

Jonas: Well, in the early seventies, there was an old brick building right down alongside the road that I think was the Knoxville stage stop--I'm not sure if it was a hotel--but it's what remains of a good-size building there. But yes, the Knoxville had a big metal shop. I'm trying to remember how they did the processing; I just can't picture it right now, condensing tower setup or a rotary furnace there at the Knoxville. I guess they must have had one, but I can't remember that. I don't think he was sending his ore out anyplace. He was producing it there someplace, and I've just drawn a mental block. I think it was that his processing facility was not up to snuff.

Swent: I'm surprised that they were serviced from here because they're closer to the other--.

Jonas: Well, actually, we used to bring truck and trailer loads, or order them, for both the Knoxville and the One Shot of what they used to call PS-300, which is a heavier than diesel number two product that they would have burned in rotary furnaces, and it was cheaper than diesel. We trucked that from the other side, but if you've been out that road from Knoxville down into Berryessa, down that way and the creek crossings, and the narrowness, imagine driving a truck and trailer along that road just before you get to the Knoxville along the edge of the creek there, and that road is not any better. I mean, it wasn't any better then than it is now; probably worse.

So it was kind of hairy, but it was impossible to bring truck and trailers from this side out there. It used to be we'd go out of here and when we got to Napa County we'd breathe a big sigh of relief because we had pavement.

Swent: You mean going down to Calistoga?

Jonas: No, I'm talking about when you leave the plant here on Morgan Valley Road and head towards where Homestake is now. When it was the One Shot and the Knoxville, it was all dirt, very narrow, rough. In the wintertime, sometimes, it was a little dicey to get in and out of there. But once you got to the Napa County line, it was paved.

So even though you had to deal with the creek crossings and what not at certain times of the year, if you got out to One Shot and the road was so bad--. Going out with a loaded truck, sometimes you could make through some of this sloppy stuff as long as you didn't sink out of sight. When you got empty, and you're on some of that stuff that used to be clay and very slippery, sometimes we'd go out the other way and go all the way around Butts Canyon Road and come into Middletown and come back, particularly when they started building a road out here.

Hauling Thousands of Gallons With No Accidents

Jonas: When Homestake came along, they had that road so thrashed out there that in the wintertime we were running truck trailers out there two and three times a day, and they would come in from the Bay Area and park, and I would run out there very frequently with my four-wheel-drive pickup and I'd go out there and see how bad it was before we would let them proceed, before they had it paved when they were in construction. The last thing you wanted was a combination vehicle with 7,500 gallons of fuel going off in a

canyon, but we didn't have one accident. We were very careful about that and there was no fuel spilled, or anybody died, or any of that.

Swent: That's quite a record.

Jonas: And there was a lot of fuel. Like I say, it was two or three truck and trailer loads a day for a couple of years, three years. And then after that, even after they got the road built during the peak of it, we would haul about seven truck and trailer loads a week into the truck shop and that would be direct. In other words, Unocal would haul it out there. We got a little commission on it, but we didn't really touch it. We ordered it, coordinated it, and made sure the trucks got out there and back. And then our own trucks would haul four, or five, six thousand gallons a day very often out there back and forth.

So even after it was paved, though, when you get a little snow or ice, but it was a lot better then, obviously. When it was the mud, it was--. Like I say, they didn't want us to do that because Homestake's permit said everything had to come from this side, but we would slide out the other end every once in a while just for safety's sake.

Swent: Sure. How did you happen to get the Homestake business?

Jonas: Well, I was already there with the One Shot Mine and so when they first started going out there to do their exploration, and their core drilling and what not, it was kind of a natural; I was there. Wilder of course tipped me off to what was going on. Plus the fact that as soon as I knew that something was going down, I got a hold of Homestake and Davy McKee and everybody that I could find out was bidding the job, whether they were coming from all over the country, I sent them letters. There was a permit process going on there too, dealing with the county and I was able to help them a little bit along those lines. So just close contact and being there to begin with.

Swent: Were you on any county commissions or anything?

Jonas: No, there was no conflict that way. When they were first permitting this thing, there's always a certain element that would be protesting. Although it wasn't too bad in Lake County because that was so far out and it was perceived by an awful lot of people as kind of bad lands. Plus the fact that this great economic boost was going to happen. They didn't have too much trouble, but there was some.

Swent: How did you first hear about it at all? From Bill, was this your first awareness of it?

Jonas: I can't remember the exact thing, but I'm sure, yes. I'm sure Wilder would have alerted me that this was going down.

Swent: There were county meetings, community meetings.

Jonas: Well, I knew about it way before that. I mean I knew that this thing was going to happen, but we did participate. You know, the county planning department asked people like myself what we thought of it. Naturally, I would tend to be in approval of the whole idea. Although, I have to say--and you don't know me, but I've got a pretty good reputation, I think, as a straight shooter around here--that I could very honestly say that I think they have honored their environmental conditions willingly or whatever.

I've been out there, not recently, but for a while we were there every day. My trucks were there and I was out there all the time. Every piece of that property and all over, there's no dead deer laying in a cyanide pool, or any of that kind of thing. If any thing like that ever happened out there, they covered that up fast, but I don't suspect that's the case. They treated their employees fairly. Naturally, they had rules that everybody went by.

I always got a kick out of it, there would be a certain element of employee out there that couldn't get a job in Lake County before that or if they could, it would be minimum wage. The next thing you know, they are making twelve, thirteen, fourteen dollars an hour out there with benefits and the whole thing squawking about working conditions or something. It was a big deal. I think the problem was they just weren't used to working with a set of rules, or whatever.

By and large, I think Homestake has done a sterling job for Lake County. I guess time will tell the way they leave it, but I have no doubt they'll be honorable about it. My dealings with them have always been--. They've been out to bid a few times, you know, and that type of thing and there's a competitive situation, but they've been very straightforward. I've enjoyed doing business with them.

Swent: Who did you deal with?

Jonas: Oh, there's been a whole bunch of them. We had purchasing agents and what not. The first purchasing agent was Wayne Bean, I think was his name. These are not people who will probably turn up in the history books because they were down the corporate thing.

Swent: Were they out here, or did you go to San Francisco?

Jonas: No, they were out here. We dealt with these people out here. Basically, obviously, Homestake central or main accounting staff and controllers would have something to do with questioning the local guys. How come you're doing this and why are you doing it with them, and you better give me some bid stuff, and whatever. I think, usually, that kind of thing was coming from a corporate office; because we took such good care of them, I don't think any of them up there really had any great ideas of if they could do any better anyplace else.

Wayne Bean was one of the first purchasing agents, and I think, later, a fellow by the name of Dwight Martin came along. There has been a number of them over the years. I think they have a lady by the name of Laura Barber doing it now, but there's not much left out there.

Lower Lake a Boomtown

Swent: At the same time there was a boom here, I would guess, in Lower Lake.

Jonas: Like I say, all of a sudden you've got a couple thousand or a thousand, or fifteen hundred people, most all of them going through this town every day. They had a bus service to haul them in and out of there, plus the heavy equipment was rolling by here just constantly twenty-four hours a day. The local bars, and restaurants, and stores, and what not did very well.

The economy as a whole, because not only Homestake, but the Geysers was peaking about that time; rentals, property values, real estate, everything was going up, up, up because there was a vibrant local economy going on, plus the fact that in those days the prices were accelerating so rapidly in Sonoma, Napa, the Bay Area, San Francisco, East Bay that we started winding up being sort of a bedroom community.

The first mayor of Clearlake was an Oakland fireman; I mean there's a little more to it than that, but there was a lot of people like the Hidden Valley subdivision down by Middletown, that was really a product of not only retirement type community but its proximity to Napa, Sonoma, and the fact that they even have to pay \$280,000 for a starter home in Sonoma and they could by one for \$100,000 here and commute.

The Ride Slows Down

Jonas: Well, now that the Geysers has dropped off significantly, Homestake is running its course, dropping down, you don't have that any more, you've got some other things replacing it like vineyard development, but that's a drop in the bucket compared to what we had there. So property values here in the county have dropped considerably. I don't want to assign a percentage, but 20, 25, 30 percent. There's a lot of these older homes that were a really big rental market that are drugs on the market now. You got that, plus you take your--.

I don't mean to sound pessimistic. I mean, Lake County is still growing, and there's people coming in but it's more of a retirement base. There's a few younger people coming in for service type things. But the Homestake thing really did jack up the economy tremendously and conversely it's gone away.

Swent: Do you think people were sort of prepared for the fact that it wouldn't last forever?

Jonas: Well, I do. When they started, they said it was going to be a ten-year run. But once you get on it and you're riding the horse, you don't think the thing is going to die. Well, I knew it would, that's why we started doing this heating thing and whatever. You kind of think that, well, the economy here has been going upward forever because when you start with nothing it's not hard to achieve percentage gains every year. [laughter]

So you kind of thought that population and what not would kind of take care, and it has to a certain extent lessened the blow. And we've gotten an infrastructure here that we probably would have never had if it weren't for Homestake and the Geysers. You've had the Yuba College Junior College program, and Mendocino in the upper end of the lake. Yuba, when Homestake was first starting, part of the deal was they were going to hire so many people out of local economy and most of them couldn't do what they needed them to do so they had welding courses and different types of things out there.

Well, they still have some of the that job training, but the facilities are there, and they're training them to do other things now. We've got, I don't know, 60,000 people in the county; whereas, like I say, in the early seventies there was 13,000. A lot of the miners went to different places and the same with the drillers, but there's still a bunch of them here. And our economy will bounce back; it's doing that right now.

The Economy is Bouncing Back

Swent: Is it?

Jonas: Well, I think it is. I'm on a board of a local bank, Clearlake National Bank. We see like our foreclosure rate, in the last two or three years has been really accelerated; whereas, in the early years of the bank, we very seldom ever had anything like that. In tune to the property values, because we would loan 80 percent of 100,000 and the property values have always been going up.

Well, now the people don't have a job any more; they're moving out of the area or they still have this place, or this place was bought for a rental as an investment by somebody and they don't have a renter in there. The appraised evaluation, I think now, is 75 and it's trashed so they walk from the loan. This is not something that is going to kill the local bank, but it's a little concern we have and we're working our way out of that. I don't see a really rapid up-tick in prices but it's looking a little more vibrant. I see positive things here, like the development of the wine industry; that doesn't bring a huge influx of people in here but it does bring some.

Swent: How did you feel about the prison?

Jonas: I didn't have a problem with that; I would have supported that; I did support it.

Swent: It was voted down.

Jonas: Oh, sure it was, yes. It was voted down. You've got a couple of elements here involved: a huge retirement community. Huge, when I say huge, percentagewise, we probably had more people over sixty, it's about like Dade County, Florida, or something like that. Those people don't want to see a lot of change. They think putting a thousand hardened cons [convicts] out here somewhere nearby is a threat to them; I don't see that as a problem. Some of them are very environmentally conscious. Then, you have the other end of the lake up there; their economy is a little bit more vibrant; they pretty much killed it along with the retirement community. That would have been a boost to the economy; that would have kind of replaced the element--.

A Pipeline for Waste Water to the Geysers ##

Swent: You said the prison might have replaced what you lost with the Homestake and the Geysers, and then you mentioned the pipeline. What is that?

Jonas: Well, they just put a pipeline from the local sewer facility up to the top of the mountain at the Geysers for waste water; it's treated waste water, for injection into the steam wells.

Swent: Are they doing that?

Jonas: They're doing that now, but one of the problems was that the steam fields were losing--. You know you have to have pressure steam coming up through the pipes to drive the turbines, and they were losing pressure and the amount of steam. The theory is that you inject this water down there to replenish the source which will jack up the quantity of steam pressure, I guess.

We had a problem here with the local sewer facility both here and Middletown not having the capacity to grow much more. They have that problem over in Clearlake Oaks right now, and they'll probably tie into this thing so they solved the problem by getting industry, and state, and federal money to build this pipeline which was just finished a few months ago and started pumping some lake water but ultimately all that would be effluent, or waste water up there. Sonoma County is looking at doing that right now too; Santa Rosa--. If that happens, I don't think that's going to start a resurgence of drilling for more steam, like new wells.

They are drilling up there now. They are doing work over stuff; there's one or two rigs, one rig drilling up there now, which we're supplying, but there used to be four or five running at any one time. Anyway, that will probably prolong the life of the power plants, and they do employ some people up there. If they run out of steam in the plants, they shut them all down, that will further decimate, or have a negative impact on the county, but that's going to be a leveling factor; it may even boost it somewhat. It may also provide some ability to build more homes and what not as they are needed, the vineyard development and whatever. There is always something coming along.

Social Impact of the Mining

Swent: What about the social aspects? Was there any change in the society from say the construction phase and then the operating phase when construction workers came in?

Jonas: Well, you know, when you have the boomer type of economy, the bars, and restaurants, and things like that you are really going to get a big jump in activity. I don't know what you're really driving at, but I didn't notice that we had a problem with crime because of this so much. We had more of a problem with the welfare and the druggies, actually; we didn't notice them so much when these guys were running around here. Most of these drillers and construction guys are a little rough and rowdy, but they're not criminals.

So, yes, it was active. There were people running around; there was more going on, that type of thing. I wouldn't call it any kind of an adverse thing to society. I mean your Baptist minister might have gotten a little upset if he walked into the Caravan Lounge on Saturday night, but other than that I don't see any big moral decay because of this. I think it was probably very positive, because there was money around, and the local merchants had some and could spend more for civic works and that type of thing. No, I think it was mostly, as far as I'm concerned, all positive.

Swent: Sometimes miners have sort of a bad reputation.

Jonas: Well, I guess if you went back to 1849 and you had an old tent encampment with no law and everybody is packing guns, it's a little different story. The miners today are highly technical. I don't see hardly anybody with a shovel in their hand; they had a loader that would load fifteen yards in one scoop. The people they had running these things had to be pretty well trained. They were fairly well paid, different situation. From my standpoint, I didn't see any social problem.

Swent: I think there are a lot of perceptions about the miner as a disruptive element in the community, and also the idea that the mining destroyed--I've heard the word pristine used a lot of times. I don't think that the One Shot area was exactly pristine when Homestake came in there, was it?

Jonas: No; there wasn't as big a hole in the ground as they ultimately wound up with, but they've been mining out there like Knoxville and One Shot and the hillsides were scarred and tore up. It was a little hard to tell because it was mostly buckbrush and low

scrubby ceder trees. It was kind of bad lands out there. I always liked it; I thought it really kind of had its own beauty. A few little cuts in the side of the hill were not a big problem.

Sure, what Wilder, and Morgan North, and the boys did back in 1890--Homestake tore out more dirt in a week than they did in fifty years because of the kind of equipment they were using. Sure, you make a hole in the ground; that's what mines are about. You did it in an area that probably didn't hurt a heck of a lot. When you get all done with it, it will be back to what it was in a relatively short period of time. It might even have a little water out there that they can use that they needed before.

Swent: You're still going out there, aren't you?

Jonas: Oh, sure, yes.

Swent: So you're seeing the reclamation?

Jonas: Well, they are doing some hydroseeding and that type of thing on some of the tailings. They're not filling in this big pit. I don't think they ever will; that will probably become a lake. They're still mining out there so they're not taking everything out of there yet.

Swent: They're processing still.

Jonas: They're processing, and they're using up their tailings and their stock piles that they had. It probably won't happen, but if gold turned around and jumped up to \$400 an ounce, they might start digging around there a little bit again. The way things are looking right now, who knows? Gold prices have jumped up and down for years. I haven't seen them quite as low as they are. And Homestake's stock right now is not at an all-time low but it's pretty low, so I probably ought to be buying some. [laughter]

Swent: I've just heard on the radio the gold price is down to 280, or 283, something like that today.

Jonas: I don't know it has that much to do with what happens on a day-to-day basis out here, but they've laid off a bunch more even after their original cuts. There just isn't a whole lot going on out there because that's a low-grade ore. Why produce something that's costing you more than--. I don't know what their production cost is, but I imagine--I was told--it's mid 200s, or somewhere around there. So, it's probably getting down to--.

Swent: There was a report out just recently that it was down around the mid 200 something; I've forgotten too, whether it was 270, or

something like that, but it is getting pretty close to the price now.

Jonas: Yes, right. Well, it's been an interesting ride, I'll tell you that.

Swent: It sounds as if you were philosophically prepared for it, though.

Jonas: Oh, yes. They told you going in it was going to be a certain length of time. Of course, you never know. Then, a year or two ago, I didn't hang a lot of hope on it, but you just kind of go with the flow. They went out there and started to drill the shaft. They went in and, "Well, let's see here," they were going to go down and try to find a vein, or whatever. Well, they went down there; I don't know what really happened with that, but that didn't pan out, or they decided not to proceed with it. Little things like that would kind of jack you up a little bit.

As far as our operation was concerned, it was a tremendous volume, but it was pretty labor intensive, and it was at a fairly competitive price. So you know, I don't like to let people go and once you get--it's almost like a governmental agency; once you get them established, you can't ever get rid of them, you know, they grow.

I hated to let people go, so I was looking for ways to perpetuate the thing, but I think that, you know, I also figured that if that thing dropped right off, or we lost the account that it was probably 40 percent of our total gross revenue, or maybe a little more, you'd just lay off about half of the people and go back to what you were doing before and you probably would be just as well off. It was really exciting and very entertaining being part of the whole thing, and it pumped a lot of money into the economy. For this company itself, I don't think the net out of it was anything where in proportion to what was really going on.

Not kicking about it, or complaining at all, but I mean--they demanded a lot; not demand; we offered and did it. We moved tanks around for him, did all this sort of stuff, very labor intensive. Whatever they wanted, boom, we're right out there because if we didn't do it, somebody else would.

Swent: Now your son is in the business with you.

Jonas: Yes, he's been with us all his life. I mean all his working life.

Swent: That's three generations now, that's pretty wonderful.

Jonas: I don't know whether I'm doing him any favors or not. As time goes on in this business, it gets--. Maybe it's just a function of age and being cynical, but it's very, very competitive, and it takes a lot of capital. It's getting to the point where the bigger players are the ones that are going to survive in the thing.

I think we're carving out a little niche with this heating thing that will enable us to stick around maybe only as heating and air conditioning contractors and maybe not in the fuel business. For his end of it, he has a trade; I mean this heating and air conditioning. We really anticipate that we're going to be here, but you've got to be pretty innovative and creative to keep ahead of the legislators; and the regulators keep cooking up more things to deal with about every other day.

Swent: You have two children?

Jonas: Yes, I have a daughter.

Swent: She's not involved?

Jonas: No, she's not involved with it. She's lives in San Mateo and is an assistant manager at the Villa Hotel down there; she gravitated towards human resources and that type of thing. She was raised up here and went to high school here just as my son Russell did. They're both married and have children.

Swent: Oh, that's nice. So there's another generation going to the Clearlake school?

Jonas: Oh, yes. Russell's children, Tyler and Kenna, they're in Lower Lake Elementary.

Swent: It's nice to hear stories like that.

Jonas: Yes, well, we have a really nice family and we're very fortunate actually. No serious problems at this point in time.

Swent: Well, it's a lovely community, in lots of ways.

Jonas: Well, it is. People slam it because in the city of Clearlake and in Clearlake Oaks we have a certain element that has developed that's not too savory.

Swent: I hear about the meth[amphetamine] cookers. Are they still a problem?

Jonas: I don't know whether meth cooking is in this year or not, but we've had that. We have a lot of druggies. I think it's damage from the fact that the property values are so low, and the rents are low, and we have a fairly generous welfare system, and the weather, even though it's freezing cold right now, generally, is pretty moderate. They can live up here year-round and almost camp in some old summer cabin for next to nothing. So, it draws them in. If the property values go up and rents, that's kind of a cold hard thing to say, but if this place becomes a little more upscale I think this problem will tend to go away. Right now, the focus is on increased law enforcement and whatever, and that's helping some, but I think it's going to be a function of economics that will take care of the situation.

Swent: You don't get away from those problems out in the country.

Jonas: Unfortunately not, but like you say, the area is beautiful and there's a lot going for it in the landscape, and the wildlife, and the recreational possibilities, the weather is great, and the air quality is good. Like some of the people that I mentioned earlier that would vote down things like prisons and what not, that don't want to see any more development, any more people here. Even old timers like myself, when I go out to the stop sign and have to wait for five minutes for all this traffic going by I say, "Where did all these people come from?"

Swent: This intersection out here with the traffic light is really something, isn't it?

Jonas: Well, when we were going to school out here there were, obviously, no traffic lights and probably hardly any signs so it's a whole different deal now; that corner down there is probably one of the highest traffic corners in the county. It's nothing like the Bay Area, but there's probably twelve, fifteen thousand vehicles a day going through there.

Swent: Yes, amazing. Main Street is looking a lot better.

Jonas: Well, it's--.

Swent: Different anyway; maybe I shouldn't say better, but it's spruced up a lot.

Jonas: Yes, it has. Lower Lake needs to try to get on the same track like Calistoga or even Middletown. Middletown is coming on, they've got their brewery down there, which is doing quite well, and a few boutiques and things like that, creating a little bit of a shopping entity in itself, and you've got the vineyard thing coming on a little bit. We really don't have that many wineries

up here, but that's happening. Lower Lake probably, I don't like to go and talk about it at the action committees and what not because whenever you do you always volunteer to do it. Probably something hooked around mining would be appropriate to, I don't know, that's what they need to get this boutique--.

Swent: Well, this was one of the leading mercury areas of the whole country at one time.

Jonas: Yes, but mercury doesn't really carry the glamour that--.

Swent: Oh, but it's mining anyway.

Jonas: Yes, mining, yes. You can downplay the mercury because we still get the fallout now like at the old Sulphur Bank Mine tailings into Clear Lake with the catfish, and bass concentrations, and mercury, and all that sort of thing. We always get all the best publicity in the world; it's either algae, or mercury in the fish, or whatever.

Swent: Hydrilla?

Jonas: Hydrilla, yes.

Swent: So there is some talk of trying to do a historical project, is there?

Jonas: Oh, nothing serious. Right here, right out the window here there is the old historical school house museum. I scoffed at that. I sat here and watched that place deteriorate; it was the old original school house and then the Masonic lodge. It was sitting vacant forever and then the pigeons, and a few of the local people, which I knew very well, got in there and they were Jane and John Weaver, and some of the others and started in on that. I thought, "Oh, man," they're pumping up money. I said, "They're just going to pour good money after bad," but they've done a marvelous thing with that place, and I'm sorry I ever said that.

My aunt, my mother's sister, is part of the Historical Society, and I called them the Hysterical Society, but it didn't go over too well. I watched them rebuild that thing, and it's really--. They've done an excellent job. Now we go upstairs and go to the theater up there and have a good time. My wife, and I, and a couple of friends went to--. What was it? The "Son of the Sheik," showed the silent film with Rudolph Valentino up there on stage and had a little black tie dinner down at the Brick Hall across the street beforehand, and period costumes, and that kind of thing.

Swent: How nice.

Jonas: So, stuff like that, and stage plays, but that place was so deteriorated. The work that John, and Jane, and the other volunteers have done up there is just outstanding.

Swent: I was up here once last summer when they had a quilt show there that was just wonderful. They really had some beautiful things.

Jonas: Well, yes, my wife is a quilter too.

Swent: There are a lot of good things going on.

Jonas: As far as Lower Lake having any--. They have an action group, or a community deals to develop the town, but I don't think anybody has got a real program at this point in time.

Swent: Well, something will come up.

Jonas: Yes, a little new blood, or whatever; it will come along. Anyway, to make a long story short, the mines added a tremendous amount to this community, and some of it is staying with us; its passing has caused an economic downturn to a certain extent, but that's something that's survivable. I think their presence here has given more than they ever took.

Swent: Well, you've answered all my questions, Jim. Do you have anything else you want to say?

Jonas: Oh, I don't know, we've rambled about anything and everything in the last few hours. I don't know. I'm kind of tapped out right at the moment.

Swent: You're a good talker; you're very articulate and that's good.

Jonas: Well, we probably missed some things, but I hope we covered what you're driving at. You could talk about the history of these mines and that type of thing forever, but there's probably some other old timers, there are a few people left around here that are older than I am that probably could give you more insight. You probably already talked to them.

Swent: Well, I've talked to a few.

Jonas: Have you talked to Irene Jago?

Swent: I have talked to Irene Jago, and I've talked to Elmer Enderlin. Do you know him?

Jonas: Oh shoot, Elmer--. I used to live right across the street from him, so I know him very well.

Swent: People talk about how dangerous mercury is; well, it doesn't seem to have--. [laughter]

Jonas: Affected him a great deal, yes.

Swent: Bothered him much; he's in good shape.

Jonas: Well, you're a little bit late, about ten or fifteen years ago the Kugelman brothers were still alive. Al Kugelman was in his nineties when he passed away, but he used to drive a wagon out here at the turn of the century hauling wine out that they made at their winery here in Lower Lake. He could regale you with tales. I think the veracity was probably pretty good, but it was really interesting to hear him talk.

Swent: Too bad, you always feel you're a little late, I guess.

Jonas: Well, in terms of history, it's always being made so it's just a matter of the point in time whenever you get into it.

Swent: That's just the point of all this, that somebody fifty years from now is going to say, "Gee, I'm glad they did that."

Jonas: Yes, when I was younger, I didn't have time--I always liked history, but I never had time to really get too concerned about what was going on. It's just like the genealogy of my own family. When you get past my father, but I'm starting to take a healthier interest in it as time goes on.

Swent: As soon as we get older, the past doesn't seem so long ago.

Jonas: My mother is the one that has total recall; I can't believe it, she and her sister, about the history of around Santa Rosa, and Occidental, and places like that, and even back to the '30s around here. She doesn't know that much about the mining part of it. Well, I probably ought to get busy and get back to work.

Swent: You've got to go. Well, thank you very much, Jim. I think we've done a good job.

Jonas: Yes, well, I hope I can be of some assistance.

Transcriber: Quandra McGrue

Final Typist: Shana Chen

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Western Mining in the Twentieth Century Series
Knoxville/McLaughlin Project

Dolora Koontz

ENVIRONMENTAL ENGINEER, McLAUGHLIN MINE, 1988-1995

An Interview Conducted by
Eleanor Swent
in 1995

Since 1954 the Regional Oral History Office has been interviewing leading participants in or well-placed witnesses to major events in the development of Northern California, the West, and the Nation. Oral history is a method of collecting historical information through tape-recorded interviews between a narrator with firsthand knowledge of historically significant events and a well-informed interviewer, with the goal of preserving substantive additions to the historical record. The tape recording is transcribed, lightly edited for continuity and clarity, and reviewed by the interviewee. The corrected manuscript is indexed, bound with photographs and illustrative materials, and placed in The Bancroft Library at the University of California, Berkeley, and in other research collections for scholarly use. Because it is primary material, oral history is not intended to present the final, verified, or complete narrative of events. It is a spoken account, offered by the interviewee in response to questioning, and as such it is reflective, partisan, deeply involved, and irreplaceable.

All uses of this manuscript are covered by a legal agreement between The Regents of the University of California and Dolora Koontz dated October 19, 1995. The manuscript is thereby made available for research purposes. All literary rights in the manuscript, including the right to publish, are reserved to The Bancroft Library of the University of California, Berkeley. No part of the manuscript may be quoted for publication without the written permission of the Director of The Bancroft Library of the University of California, Berkeley.

Requests for permission to quote for publication should be addressed to the Regional Oral History Office, 486 Library, University of California, Berkeley 94720, and should include identification of the specific passages to be quoted, anticipated use of the passages, and identification of the user. The legal agreement with Dolora Koontz requires that she be notified of the request and allowed thirty days in which to respond.

It is recommended that this oral history be cited as follows:

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Dolora Koontz, 1995

INTERVIEW WITH DOLORA KOONTZ, ENVIRONMENTAL ENGINEER, MCLAUGHLIN
MINE, 1988-1995

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INTERVIEW HISTORY--Dolora Koontz

Dolora Koontz represents several new trends in mining in the late twentieth century: born in 1954, she trained as a biologist, and has been employed by Homestake Mining Company as an environmental engineer to coordinate the processes of mineral extraction and environmental protection. It is safe to say that none of this would have been conceivable to a graduate of a mining college at the beginning of the century. The letter of invitation to participate in the oral history project was sent to her on 4 October 1995 and the interview took place on 19 October 1995 in the conference room at the McLaughlin Mine office.

Dolora was born and raised in Golden, Colorado, and graduated from Western State College in Gunnison, Colorado, in 1975, six years after the passage of the National Environmental Protection Act. She had no interest in mining although her parents came from the Lead-Deadwood [South Dakota] area and her grandfather had worked for the Homestake Mine there. Her husband, Gary Koontz, graduated in 1974, also as a biologist, and became a Homestake employee at the Pitch project in Gunnison in 1979. Dolora worked for the Forest Service before joining Gary in 1983 at Pitch; he was a mine surveyor and she was a technician in the engineering department.

In 1984 with the closing down of the Pitch operation, Gary transferred to McLaughlin as mine surveyor; she waited two years to be hired as a laboratory technician and two more years to become environmental engineer. She recounts her varied experiences in monitoring water quality, renewing permits, rescuing bats, and reclaiming mine pit and waste dump areas.

In April 1997, Dolora wrote in a letter: "Following the final closure of the mine pit last June, my husband and I spent the summer and fall traveling throughout Alaska, Western Canada and the desert Southwest. It was truly a wonderful adventure!" They now reside in Ft. Collins, Colorado. Of the oral history project, she says, "It's rather exciting to become part of the historical record."

The tapes of the interview were transcribed in the Regional Oral History Office and the lightly edited transcript was sent to Dolora Koontz in August 1996. She reviewed the transcript very carefully, making a few important changes and additions of technical details. The manuscript was corrected and indexed at our office. The tapes are deposited in The Bancroft Library and are available for study.

The Dolora Koontz interview is one of more than forty interviews which were conducted by the Regional Oral History Office from 1993-1997 in order to document the development of the McLaughlin gold mine in the

Knoxville District of Lake, Napa, and Yolo Counties, California, from 1978-1997, as part of the ongoing oral history series devoted to Western Mining in the Twentieth Century. The Regional Oral History Office was established in 1954 to record the lives of persons who have contributed significantly to the history of California and the West. The office is a division of The Bancroft Library and is under the direction of Willa K. Baum.

Eleanor Swent, Project Director, Research
Interviewer/Editor
Regional Oral History Office

The Bancroft Library
Berkeley, California
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Regional Oral History Office
Room 486 The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name Dolores Marie Koontz

Date of birth 5-13-54 Birthplace Denver, CO

Father's full name Glen Donald Zesbaugh

Occupation fisherman Birthplace Minneapolis, Minnesota

Mother's full name Gloria Louise (Allison Zesbaugh) Meriston

Occupation Medical Transcriber Birthplace Stuart, Nebraska

Your spouse Gary Ralph Koontz

Occupation Surveyor Birthplace Portland, OR

Your children None

Where did you grow up? Golden, CO

Present community Ft. Collins, CO

Education BA in Biology, Western State College, Gunnison, CO

Occupation(s) Field Aid, museum work, Engineer's Asst, Lab Tech,
Jr. Environmental Engineer, Environ. Eng., Sr. Environ. Eng.

Areas of expertise water quality, geotechnical monitoring, reclamation,
wildlife

Other interests or activities bird watching, running, cycling, kayaking,
skiing, hiking, photography

Organizations in which you are active running club

INTERVIEW WITH DOLORA KOONTZ

DOLORA KOONTZ, ENVIRONMENTAL ENGINEER, MCLAUGHLIN MINE, 1988-1995

Early Years and Education at Western State College, Gunnison, Colorado

[Date of Interview: October 19, 1995] ##¹

Swent: We are interviewing at the McLaughlin mine, where Dolora is working as an environmental engineer. Let's find out how you came to get to that. You said you were born in Colorado?

Koontz: Yes. I was born and raised in Golden, Colorado. I went to college at Western State College in Gunnison.

Swent: And when were you born?

Koontz: In 1954.

Swent: What did your parents do in Golden?

Koontz: My dad was working with the rubber company there in Denver, in the purchasing department. My mom was the secretary down at the church. They both obviously came from the Lead-Deadwood [South Dakota] area and moved to Golden for the job opportunities of the Denver/Golden area.

Swent: What was the rubber company? I'm trying to think; I used to know.

Koontz: Gates.

Swent: Gates. That was a big business.

¹## This symbol indicates that a tape or tape segment has begun or ended. A guide to the tapes follows the transcripts.

Koontz: Yes. It was a big business back then.

Swent: Was your father technically trained? Was he an engineer?

Koontz: No. But he did work in the purchasing department. He enjoyed that because he was very much a people person. He enjoyed that end of it.

It was pretty quiet growing up in Golden. It was a small town. Denver wasn't very big back then.

Swent: I suppose at that time girls didn't go to the School of Mines, did they?

Koontz: No. There were a few of them starting to go at the time I went to Western, but not very many. I was looking for a biology degree, anyway, which is related to what I do now. I enjoyed the mountain setting of Gunnison, and I decided that was where I wanted to go to school.

Swent: It's beautiful country. How did you get to Gunnison? Did you drive?

Koontz: Yes. And I graduated in '75.

Reality in the Job Market, 1975

Swent: Was your husband [Gary Koontz] a student there also?

Koontz: Yes, he was. He graduated a year before I did. We both have our biology degrees. We went back to Denver to--you know, you're all charged after college to go make your mark [laughter] and get hit with reality in the job market.

Swent: When was this?

Koontz: This was June 1975 when we went back to the Denver area. Actually, back to Golden. And after about a year or year and a half back in the city, we decided we enjoyed the small-town setting more. So we went back to Gunnison and the Western Slope just looking for jobs to see where we could find something.

Swent: I'm trying to think--the EPA [Environmental Protection Agency] was established in 1970, wasn't it?

Koontz: Was it early seventies or--

Swent: It seems to me it was 1970.

Koontz: I can't remember.

Swent: That was just about when the big flowering of the environmental movement came about, wasn't it?

Koontz: Yes.

Swent: What was happening in the environmental field there?

Koontz: It was just really getting going, from what I remember. The graduate students at our school were doing a lot of work with high-altitude revegetation, working with mining companies on the Western Slope in that respect.

Swent: Did you hear of the Henderson Mine at that time?

Koontz: Yes. That was going on at that time.

Swent: There was a big controversy, I think, wasn't there? Were you aware of that?

Koontz: Until my husband started working at Homestake, I didn't pay much attention to mining.

Swent: In spite of the fact that your parents were from the Black Hills?

Koontz: Yes. My grandfather worked for the [Homestake] mine, but it never really registered, I guess.

Swent: So what did you think you would be doing with biology? What was your goal?

Koontz: I actually thought I would go on for my Master's, but once you get gainfully employed it's kind of hard to bail out. My husband tried teaching for a while and decided that was not what he wanted to do. So when the opportunity at the mine opened up--

Swent: Well, you went to Gunnison first. You went back up to Gunnison, you said. Where did he teach?

Koontz: Actually, it was in Paonia where he was teaching for a little while.

Swent: That's where the High Country News is. Did you ever run into that?

Koontz: No.

Swent: It's an environmental publication that's based in Paonia.

Koontz: Oh, really? In fact, that's probably where he first ran into the mining aspect--Westmoreland, wasn't it?--coal mine there outside of town. It was probably the biggest employer outside of agriculture.

Technician for the U.S. Forest Service; Dutch Elm Disease Control

Swent: And what were you doing with your biology?

Koontz: I was working for the Forest Service seasonally for a while.

Swent: What did you do with them?

Koontz: I was a forestry technician running the Dutch elm disease control program in Jefferson County.

Swent: What did that involve?

Koontz: Basically, a lot of fieldwork: going out and surveying the communities, plotting (mapping) all the elms in town and going back and sampling those that appeared to be coming down with Dutch elm disease. From there they would go back in and remove the diseased trees to try to control the spread of it. I also did some tree inventories for communities and some firefighting; you know, you get thrown into miscellaneous things there.

Swent: No, I don't know [laughs].

Koontz: Oh, okay [laughs]. Like with any job, let's put it that way. Everything from firefighting to sampling to a lot of mapping of the tree communities. It was interesting work.

Swent: Mostly with trees?

Koontz: Yes. Again, that was seasonal work. From there we spent a few summers in Yellowstone, I was just basically working in a museum. Gary was on the helitack fire crew. I really didn't start using my degree, I guess, until I came to McLaughlin.

Swent: What had you done as an undergraduate? What particularly had you studied?

Koontz: It was a broad biology degree. The main emphasis at that point was in botany. I couldn't really pin down one specific thing I wanted to go with; it all interested me.

Swent: You loved it all?

Koontz: Yes, I did.

Swent: Did you do a lot of fieldwork?

Koontz: In college, no. Not a lot of that.

Swent: Were computers a part of it?

Koontz: I did take one computer class. The computer took up an entire room. This was back when they were in rooms rather than on a tabletop. You had your big tapes and the keypunch machines. There wasn't a lot of computer work to be done back then [chuckles].

Swent: But you did some.

Koontz: Yes, a wee bit. I didn't really get into computers again until I came here, and obviously it's been a great experience for me opportunity-wise.

Swent: That's been a whole new world. The first one you were using--what kind was it? Do you remember?

Koontz: Oh, gosh, I don't remember, no.

Swent: But big.

Koontz: Oh, yes. They had to be in temperature-controlled rooms.

Swent: And you fought for time?

Koontz: Fought for time, definitely.

Swent: Did you work in the middle of the night sometimes?

Koontz: Tried to avoid that; I'm not much of a night owl.

Swent: Well, Gunnison has a pretty fierce climate. You don't do much tree planting in the middle of the winter, do you?

Koontz: No. A lot of that was in the Denver area during the summers and back and forth. It was in '79 when we went back to Gunnison permanently. We spent until '84 there.

Gary Koontz, Surveyor at Homestake's Pitch Mine, 1979

Swent: So it was in '79, then, that your husband began to work for Homestake?

Koontz: Yes.

Swent: And did you also?

Koontz: No, not at that point.

Swent: I see. And what did he do?

Koontz: He started out on the labor crew and then went to truck driver and then got into the survey department. He's chief surveyor here. He really enjoyed the surveying and stuck with it.

Swent: But he had also been a biology major?

Koontz: Yes.

Swent: I see. Surveying wasn't directly in line with his training--

Koontz: No, no, but he did enjoy it, so he stuck with it.

Swent: This was the Pitch Mine.

Koontz: Right.

Swent: Mining uranium.

Koontz: Yes. Open-pit uranium mine with an elevation of about 10,000 feet. Very cold winters with lots of snow [laughs]--doing fieldwork on snowshoes.

Swent: Did they mine all year round?

Koontz: Yes, we did. I didn't start there until '83. I was with the engineering department at that point. It was a different world than out here.

Swent: Were you aware of the community feeling about the mine?

Koontz: At the beginning, yes; I know the attitude has definitely changed. More people became employed, and they started to see that the community was not going to be impacted--of course, they never did build the mill there. They continued to ship all the ore to Grants [New Mexico].

Swent: There was, as I recall, severe opposition.

Koontz: Yes. At the beginning there definitely was.

Swent: Were you there then?

Koontz: Just kind of got in at the tail end of that, so I really couldn't say I was involved with it or heard a lot about it. I knew there was opposition.

Swent: When you came back to Gunnison was it hard to find housing?

Koontz: At that point it was just starting to get more difficult. Prices were going up for rentals and homeowners--it was great for people who already owned their home. Of course, you had Amax starting to go up at Crested Butte, so we were starting to see a boom again.

Swent: Were they ever able to open their mine at Crested Butte?

Koontz: It never really got off the ground. They bailed out. I can't remember how long after that when Pitch shut down; it was a real boom and then a bust shortly thereafter. The community definitely felt it.

Swent: They had not welcomed it.

Koontz: No. I think they had changed their mind before it shut down just because of the cash flow and the jobs.

Swent: And maybe some of the anticipated dangers didn't happen.

Koontz: Yes. They didn't happen. We had the water treatment plant, and I know reclamation had been an ongoing issue back there; it's hard to revegetate at 10,000 feet [laughs] with winters like they have.

Swent: So your husband was doing the mine surveying.

Koontz: Yes.

Dolora Koontz, Engineering Technician at the Pitch Mine, 1983

Swent: And what was your job?

Koontz: Once I started at the mine I was in the engineering department as a technician.

Swent: What does that involve?

Koontz: I was helping with the surveying; we (my husband and I) were actually working together [laughs]. I was there towards the end of the operation. They were back to one shift, basically; just a few people in the office. We all became jack of all trades: you do some filing, you go out and do your surveys, you help a little bit--I didn't do so much as my husband, but on occasion we would help with the environmental [department] going out and getting the samples and that sort of thing.

Swent: Samples of what?

Koontz: The air stations mainly. I guess that's what he helped them with. And it was interesting to see a close-down of an operation.

Swent: What did that involve?

Koontz: Just finalizing everything, making sure that things were complete as far as the records on the shipment on the ore and getting all the files in order, all the maps thinned out, just getting ready for archive, basically.

Swent: Where did they put them?

Koontz: I thought it went to San Francisco.

Swent: Maybe. I don't know.

Koontz: We left there--he (my husband) was transferred just a couple months before the final shutdown, so I didn't get to see the end of it all.

Swent: You didn't turn the lights out?

Koontz: No. We were close to that [laughs]. It was interesting, especially during the winter months when we would have the equipment in front of us to keep the roads open, and there were a few times we would have to bail out because it was snowing so hard they couldn't keep the roads open.

Swent: Are you skiers?

Koontz: Yes. Cross-country skiers, mostly. We enjoyed the winters even though they were cold, and I'm not sure I would go back to that much of a winter. But we enjoyed the skiing, the ice skating. During the summer we hiked and backpacked. We enjoyed that country.

Swent: What sort of wages and benefits were you getting? Do you mind saying?

Koontz: If I can remember, I don't mind saying [laughs]. Benefits were pretty much the same as what they are here. In fact it's probably a little better here: we get the health, and dental as well. But we had a good health care package.

Swent: Was there a hospital in Gunnison?

Koontz: Yes, a small hospital. We did get the layoff package--or at least I did--which at that point was two weeks paid for every year of service. It wasn't much when I--but every little bit helped [laughs]. It seems it was somewhere around seven and a half dollars an hour, but it's been a while.

Swent: And were you renting?

Koontz: No, we owned a trailer at that point.

Swent: I see. So you paid for a lot?

Koontz: A lot, yes. I think we were paying a hundred dollars a month for a lot.

Swent: Did that include utilities?

Koontz: No. We paid utilities, but it did include the water. It was pretty cheap living at that point.

Swent: I'm just trying to get a sense of it--what did you wear when you worked?

Koontz: During the winter, down clothes and everything you could find [laughs]. Basically, the same we do here in the summer: jeans and a tee shirt.

Swent: Safety gear?

Koontz: Steel-toed boots and hard hats and safety glasses.

Swent: Did the company provide the safety things?

Koontz: The hard hat they did. The safety glasses and the boots, you were pretty much on your own. So there were a few differences. Here, we do get the boots up to a certain price and then you're on your own past that.

Swent: What sort of safety training were you given at Pitch?

Koontz: When I came on, it was just sort of one-on-one because I was probably the last new hire. Basically just spent the day with the safety officer, and he drove me around, and we talked about mining and all the hazards. Then we went back to the office, and he went through everything that he was required to share with me as training. I signed all the paperwork, and I was ready to go.

Swent: What were the hazards there?

Koontz: The same as at any open-pit mine. You have to watch for a rockfall; the equipment driving on the opposite side of the road; giving the right of way to all the heavy equipment. Those were the biggest, being out in the field.

Swent: Were there radiation hazards mentioned?

Koontz: No, because we were basically open-pit.

Swent: As I recall, that was one of the fears of the local people, wasn't it?

Koontz: Yes. I'm sure that was a definite hazard when they were doing the underground mining in the early days there. But no, that wasn't even brought up during my safety training, although we were all aware of it.

Swent: So how did you happen to come to California?

Koontz: My husband was transferred in '84.

A Struggle to Move and Adjust, 1984

Swent: How did that come about?

Koontz: His boss had been transferred out here--

Swent: Who was that?

Koontz: It was Tim Janke and Roger Lucas.

Swent: So they transferred out here first.

Koontz: Yes, they came out first, and then they brought Gary out.

Swent: Gary is your husband.

Koontz: Yes. It was a culture shock coming to California [laughs]. Definitely a higher cost of living.

Swent: Did you consider not moving?

Koontz: We did, although at that point we went through probably the most severe winter we had ever spent in Gunnison. So we were considering moving anyway. With the mine shutting down--and Amax had already shut down--the town was really struggling, and the economy in Colorado as a whole was on the downslide, and so we thought we would give it a shot. We had nothing to lose by trying, so we came out. It was a struggle to adjust at first, but in the long run--

Swent: Did you bring your trailer with you?

Koontz: No. We rented here for the first five years, and the last six we've owned our place.

Swent: So you drove out.

Koontz: We drove out, our two vehicles (Volkswagen bug and Volkswagen van) loaded to the gills, and back for the U-Haul.

We made the mistake of going back for the rest of our things by bus--both of us hate to fly--I will fly again before I ever get on another bus [laughs]. You sure meet a different cross-section of people on a bus. And the bus drivers are crazy. I would take my chances on a plane even though I don't enjoy flying.

Swent: How do you go from here to Gunnison by bus?

Koontz: Oh, a long route through Nevada and Utah, and ultimately hit I-70 and on in from there. It was probably the longest ride of my life [laughs]. And then we rented the U-Haul and brought the rest of our stuff out.

Swent: That took you a while?

Koontz: I would say that within a week we had everything out here.

Swent: And where were you at that point?

Koontz: We were in Riviera West, which is on Clear Lake. It's between Kelseyville and Lower Lake.

Swent: How did you choose that?

Koontz: The Lucases were living in that development, and after looking around at different communities we decided that development was really one of the nicer ones around. It's quiet. We were lucky enough to find a rental because there weren't very many available at that point with all the mining activity going on here.

Swent: This was exactly when?

Koontz: April of '84.

Swent: So there was still construction.

Koontz: There was construction at that point, yes.

Gary Koontz, Surveying for the Developing McLaughlin Mine

Swent: So what was your husband's job?

Koontz: He was in the survey department.

Swent: For Homestake?

Koontz: Yes.

Swent: Homestake was still development; it wasn't operations yet, I guess.

Koontz: Basically he came in at the time construction was getting going.

Swent: I see. Did they have a pit then?

Koontz: No, they were doing a lot of claim-line work. Crawling through the chamise day after day [laughter].

Swent: And hot as opposed to cold.

Koontz: Yes, very much so.

Swent: And what were you doing?

Koontz: At that point I did look around for a job a little bit and applied here, but they had their local hiring quota that they were trying to meet here. If you moved into the area, it was kind of hard to get on at that point. I didn't actually start working up here until '86, and at that point I came on in the lab as a sample technician.

Dolora, Sample Technician in the Metallurgical Lab, 1986

Swent: Metallurgical?

Koontz: Yes, in the metallurgical lab.

Swent: Did you work before that? Any other place?

Koontz: No. Not here in California.

Swent: Kind of a long period.

Koontz: It was, it was.

Swent: How did you feel about that?

Koontz: Frustrated, as far as job opportunities. I really at this point wanted to get back into something technical. In Lake County there wasn't much, you know. So it was a challenge [chuckles].

It was a good opportunity to get on in the lab. After college and spending time in a lab, I was never that excited about going to work in a lab. But it was an opportunity, and I remembered why I didn't want to spend my life working in a lab [laughs]. It's a different environment, it really is.

I started out in sample prep, and I was there for four and a half months, and then I transferred into the wet lab, into the analytical department there.

Swent: What were you analyzing?

Koontz: Samples out of the mill. They would collect samples throughout the process at various points to see how well we're doing on recoveries. A lot of it was blast-hole or drill-hole analysis for gold assays. All that information goes back down to the mine so that they can then go out and resurvey the ore blocks. I did that for a year.

Swent: What sort of analyses--how do you do these? Are these chemical processes?

Koontz: Yes. Chemicals, acid digestion--fire assay they're using more so now, but that was basically used when I was there just on samples coming out of the refinery. And so it's changed a little bit since I was in there. Everything else that we were doing was basically an acid digestion type of procedure.

Swent: I'm just wondering if there were any new processes or technologies involved from the earlier days.

Koontz: I think they used fire assay more so in the earlier days, when the acid digestion was a newer--I'm not sure if it was new to this site or not. They have reverted back to fire assay with a followup in digestion. I'm really not sure on that.

Swent: Were you using computers at all in any of this?

Koontz: At least part of the instrumentation was tied to a small computer. They now have the whole system tied into a computer, and we've really upgraded the computer systems around here the last few years. So basically it was just the old-time chemistry lab type of situation.

Swent: And you kept the records on paper, then?

Koontz: Yes, on paper. I think data entry is the way to go, but I really haven't kept up with them in the lab since I moved out of there.

Swent: So this was straight days?

Koontz: Straight days, yes.

Swent: And your husband also?

Koontz: Yes. We were both lucky in that respect.

Swent: That was nice. So you said you began at the lab in--

Koontz: In sample prep in January of '86.

Swent: The first bar was poured in the spring of '85. Were you here for the big event?

Koontz: Yes, we came out for the big event. I didn't know many people at that point, obviously--we hadn't been around too long--other than the people in the survey department, the engineering department. It was interesting to finally get to see the operation and to see the plans.

Swent: I say "big event," but I guess there were two big events: one was the first pour in March of '85, and then the dedication. Which one were you meaning? Which one are you thinking of?

Koontz: I guess I'm thinking of the dedication more so.

Swent: I think that was in September or October of '85.

Koontz: You're right.

Swent: And there were tours and a barbecue. That was pretty exciting.

Koontz: Yes, we had a good turnout for that.

Swent: But you were not employed at that point.

Koontz: No.

Swent: So then January of '86 was--when was the terrible winter with all the rain?

Koontz: That was '86. I remember flooding.

Swent: How did that affect you?

Koontz: I had never been through a flood before; it was pretty interesting.

Swent: Where did it affect you?

Koontz: I wouldn't say it affected me personally other than driving to work was hazardous in areas. The lake at that point came up almost to Main Street in Lakeport, which means there was a block and a half of the town that was under water. It was pretty amazing to see. At that point I was not in the environmental department, so it would have affected me much more so--like it did this past winter [laughs]--had I been in the department.

Swent: Why?

Koontz: The floods this past year kept us pretty busy. It was a real challenge to keep up with everything. In the long run we came out doing really well, but it was nip and tuck in a few areas to get there. It was nerve-wracking keeping tabs on the all the water quality and trying to coordinate discharge of water so we were maintaining permit compliance.

Swent: I guess we'd better get to that later.

##

Swent: --sample prep. Getting to work was a problem. Your house wasn't bothered?

Koontz: No. We were up on the hillside.

Swent: Pretty exciting.

Koontz: It was. I had never seen so much rain in my life [laughs].

Swent: I was thinking that '83 was a particularly bad winter.

Koontz: That was bad also, yes. That was the winter before we came. And '86 was when Davis Creek filled.

Swent: And of course for your husband, I guess, surveying was certainly a problem in the rain.

Koontz: Yes, trying to keep instruments dry so that you could work.

Swent: They had a pit by then.

Koontz: Yes, a small one.

Swent: It got pretty full of water, I guess.

Koontz: Yes, and mud up to your neck. You had days when you couldn't survey because of the fog. A lot of different environmental things to deal with than we had dealt with before. Amazingly, the operation kept plugging along [laughs].

Environmental Technician, 1987

Swent: When did your job change then? How did that come about?

Koontz: The job opening came in April of '87, and I applied for the environmental technician position and got that. I saw it as an opportunity to use my degree. It's worked out really well for me; I've enjoyed it.

Swent: Who were you working for? Who else was in there?

Koontz: Phil Barnes was who I reported to, and he's now the environmental director at Lead. And then John Lawton was the other environmental engineer at that time. And of course Ray Krauss was here throughout the whole thing.

Swent: When did you meet him?

Koontz: During the interview. Actually it was a follow-up interview. I had my original interview with Phil and John, and once they made their selection I went in and talked to Ray.

Swent: And that was the first time you had met him?

Koontz: That was the first time I had met him, yes. I had heard a lot about him, I just never--

Swent: What had you heard about him?

Koontz: That he ran a tight ship [laughter]. But of course that's information coming from operations personnel who a lot of times would just as soon not have to have all the constraints put upon them. And that aspect has changed somewhat over the years. We still have our struggles in getting people to see the way they should be doing things at times. For the most part, I think, a lot has been incorporated into the job, of the people out there doing the job, so that it's much better than us trying to go out and coordinate every activity that they're trying to do.

But I started as the technician and picked up the water quality and air quality and geotechnical monitoring. My involvement with the air quality program was strictly field work, changing air filters and general maintenance of the stations.

Monitoring Water Quality

Swent: Tell me in detail what this involved. Maybe go through a typical day at work.

Koontz: We have creek sampling--at that point we had twelve stream stations where we would collect samples on a quarterly basis. That would be going out and filling up a series of bottles with different preservatives. These are sent off to our contract lab.

Swent: What were you sampling for?

Koontz: A series of metals as well as general chemistry--

Swent: This is discharge from--

Koontz: No, this is just straight creek. We also do discharge sampling--

Swent: But where are the creeks?

Koontz: Hunting Creek, which runs from the process area all the way down past the mine site. It is the one creek that goes through the entire property. Davis Creek, which is over the ridgeline and where our freshwater reservoir is. Knoxville Creek is south of the mine site. We also sampled Putah Creek, which is in the Middletown area; it heads down to Lake Berryessa. Hunting Creek

discharges into Putah Creek. And then the other creek we were sampling at that time was Cache Creek, which goes down through Rumsey; it's the creek that Davis Creek reports to.

Swent: What's the relationship with all these creeks with the mine and the processing plant? Is the water before or after?

Koontz: The stations were set up so that you would have upstream as well as downstream. And on Hunting Creek we also had intermediate sites and still do. We have at this point thirteen years of data to draw on. In addition to the creeks, we also have thirty groundwater wells. We have twelve of them that totally surround the tailings impoundment so that we could detect any potential seepage that would be coming from the impoundment itself. There are nine what we call observation wells which are drilled into the tailings dam embankment and allow us to detect any potential early seepage through that impoundment. And then down at the minesite and waste rock area we have nine wells and three underdrains that we monitor down there. Those again surround the facilities. And then on top of that we would have our discharge sampling which is in compliance with our NPDES permit.

Swent: What's that?

Koontz: National Pollution Discharge Elimination System. It's an EPA criteria permit that's issued by the state water board. And those are collected just during stormwater discharge that comes from our sediment pond below the waste rock area. It's freshwater runoff; it has only contacted the waste rock, the rock that does not contain the ore, which is deposited at our waste rock facility and later reclaimed.

Swent: You must have had to go through quite a little training.

Koontz: Actually, I was shown where the sites were. The previous technician spent about a week with me--the rest I learned by going through documents, instrument manuals, and asking lots of questions.

Swent: Who was that?

Koontz: That was Pete Swartz. He had transferred to the geology department. He had a geology degree, and he was ecstatic to get on there. And so he spent about a week with me showing me the sites and how to pump the wells so that you could purge them. You have to pump them to dryness or pump three well volumes worth out and allow it to recharge before you come back for your sample.

Swent: How do you do that?

Koontz: We use nitrogen and just a little electronic timer that has a two-way valve on it so you can pressurize the system for a certain period of time and then allow it to bleed off. It just pushes the water up the column and out the discharge tube.

Swent: And you collect the water in something?

Koontz: Yes. We have a series of bottles with various preservatives in them depending on different analyses that we're running them for. We run about twenty-four different analyses on each sample site. And that's done every quarter, on a quarter-year basis. Everything is done according to a protocol: you have proper sampling techniques so you don't contaminate your samples; proper refrigeration so that you maintain the quality of the sample; fill out chain-of-custody forms to ship it off to the lab.

Swent: What's that?

Koontz: Chain of custody. It's a legal document for transfer of samples from one facility to another.

Swent: Where does all this come from? Is this from the government?

Koontz: Yes, some of it's EPA protocol and just basically good sampling technique.

Who Monitors the Monitors?

Swent: Is there somebody somewhere that checks out all this to make sure you do it right?

Koontz: Well, all the data is reported, we have records, everything is done with a record to back it up, and all that is on file. The water board, if they want to come in and look at the record, they're free to do so. All the data is reported to them and to all of our other agencies for review. It's all there. You have your paper trail from step one on so that you can show that you've done everything according to--

Swent: Are you aware that any of them ever come to check on it?

Koontz: The water board comes out periodically. It used to be on an annual basis. The last few years they've pretty well been backlogged, and they're delinquent in getting out here, actually. We continue to submit the reports, and then we do have our

internal audits. They come through and look at things. In fact, we're expecting an audit next week [chuckles].

Swent: This is somebody from Homestake?

Koontz: Yes. So it's there, and if there's ever a problem, there are records that can show what we have done.

Swent: I understand that there was a community group--what were they called? Technical Review Committee?

Koontz: Right.

Swent: Do they come around and breathe down your neck?

Koontz: They don't come here, but they do breathe down our neck [laughs].

Swent: How do they do that?

Koontz: They were set up by Yolo County to oversee what we were doing. Yolo County was probably the hardest county to convince as far as getting the mining going, and they still have their people down there who will come to hearings and testify that, you know, we're going to ruin their environment. And of course they're a ridgeline away in a totally separate area.

Swent: Are there still hearings that they come to?

Koontz: Occasionally, yes. There are a few people who do show up. There are a couple that come to mind: Avery Tindell is one, and I forgot the name of the other fellow.

Swent: John Ceteras?

Koontz: Yes.

Swent: What kind of hearings do you still have?

Koontz: Annually they go ahead and review our annual environmental report.

Swent: Who is "they"?

Koontz: The county. All the counties review. Those (the reports) are submitted to all the agencies on an annual basis, but Napa County and Yolo County also review those publicly and approve them.

Swent: There is a public hearing still.

Koontz: Yes. It's just basically a review. So the TRP is still active; they still meet a couple times a year, I guess, but not as frequently as they used to. And I don't think they're quite as aggressive as they used to be [chuckles]. They're staffed with people from the university down there as well as--I think there's one public member on there now.

Swent: I guess that would be the University of California at Davis?

Koontz: Yes.

Swent: So you're conscious of these monitors?

Koontz: Oh, yes [laughter]. They make us conscious. Ray and Phil and now Jim Jackson, who is the other environmental engineer in our department at this point, are the ones who dealt with them directly. They sit down with TRP, which is the Technical Review Panel, as well as Environmental Resource Associates, which is Goldman's group from Davis. They do all the Davis Creek Reservoir work. His people, Darrell Slotten and John Reuter, review our report, and they also write their own annual report on the Davis Creek monitoring that's conducted. All that gets reviewed and discussed in great detail in Yolo. Napa reviews it also; Napa is our lead agency. I think they're a little more professional in Napa about things.

Swent: Professional in what sense?

Koontz: They will work with you on things; they meet timelines. Yolo County, it's more of a struggle to get things done in a timely manner and to find out what they need from you in order to get things done. It's a little more laid back down there, I think.

Swent: In Yolo County?

Koontz: Yes.

Swent: I was unaware that you were still under these kinds of restrictions.

Koontz: It's not as bad as it was before. Obviously, with all the data we have to date that shows we have not impacted the environment. A lot of people have said, "Okay, we're wrong. On to other things." But there are still a few of the staunch survivors [laughs] who are still there.

Swent: They probably feel that if they didn't keep at you that it wouldn't--

Koontz: Yes, could be.

Swent: Are you satisfied that you have kept the water quality up?

Koontz: Yes, definitely.

Swent: They're mostly satisfied too?

Koontz: Yes. The data shows it, and the water board is very satisfied with what we do. We work very hard at it.

Swent: You're checking only for minerals. What about organisms?

Koontz: We do have an aquatic ecology monitoring program, and that is conducted by outside researchers and consultants. John Reuter and Darrell Slotten from ERA conduct all the aquatic ecology work on Davis Creek and Davis Creek Reservoir.

Swent: Only there?

Koontz: Yes. And then the group from Bodega Research Associates, headed up by Peter Connors, they go ahead and do the aquatic ecology monitoring on Knoxville and Hunting Creek for us.

Swent: You contract those out, in other words.

Koontz: Yes.

Swent: You are only doing mineral tests.

Koontz: Yes. We're just doing the chemical analysis of the water, right.

Geotechnical Monitoring

Swent: So you do each of these quarterly, which means that you're on a rotation basis that keeps you pretty busy.

Koontz: Right. And then there's the geotechnical monitoring which looks at the integrity of all the water impoundments. We have three impoundments that are under the jurisdiction of the DSOD--the Division of Safety of Dams.

Swent: Now how do they measure that?

Koontz: That's based upon the volume and height of the embankment as to whether or not it falls under their jurisdiction and Davis Creek

Reservoir, the tailings impoundment, and the M-1 pond all fall under their jurisdiction.

Swent: What does M-1 mean?

Koontz: I think that would just refer to mine, pond one. It's the pond down on the shoulder of the South Pit.

Swent: But how do you measure the integrity?

Koontz: We do visual inspections where we look for slumps and cracks or anything that might indicate some instability in the slope itself. Then we have what we call piezometers. Those are embedded in the embankment, and they look at the phreatic surface in the impoundment or the water level within the soil itself--how far up into the impoundment is that coming.

Swent: Are you personally doing that as well?

Koontz: I did when I was a technician. Our technician now covers all of that. Then we have surface monuments that are surveyed in just to detect any potential movement. And that pretty well takes care of our geotechnical monitoring. Those are done quarterly or following heavy rains or after earthquake shocks [chuckles].

Swent: This is vulnerable earthquake country.

Koontz: Off the top of my head, there may have only been one I recall that we actually felt here on the site, and it was pretty minor.

Swent: Now this is all to do with water. Do you do air as well?

Koontz: No, I used to do the collection of the air filters when I was a technician. We now divide those programs up; our technician still does all the technical work out in the field. Jim Jackson handles the air quality in our department at this point.

Swent: But you, as a technician, were only doing water.

Koontz: No. Water, geotechnical, and air quality mostly. And wildlife observations and monitoring.

Scheduling the Monitoring Around the Year

Swent: We haven't gotten into that yet. That's a lot of areas to cover.

Koontz: Yes, it is. We have it all set down on an annual schedule--daily, what needs to be done. Once I got it to that point it was much easier to work with than when I first came into the department. The technician who was doing it before was not quite as organized. I can't work in a disorganized setup, so they gave me the computer program where we could put it on a calendar system. I went ahead and organized it and put it in there and got it to a point where all you have to do is look at your calendar and know what you're supposed to be doing, and you make sure everything gets done that way.

Swent: This had not been that way before?

Koontz: No, it had been charts that showed how often things need to be done, and he just basically kept track. It worked for him; all the records are there, if we need to go back and look for things. It's just a difference in how people operate.

Swent: So now they just check on the computer, and if it's Tuesday it's Belgium, right?

An Unexpected Amount of Acid Drainage

Koontz: Basically, yes. And of course that changes a little bit as you get into winter and need more sampling done. It was '87 when we first started realizing that we had more of an acid generation problem with the wasterock than was originally projected. I spent a lot of that winter "living" in the wasterock area just tracking different--

Swent: Seepage coming from the wasterock?

Koontz: Yes, just storm water runoff coming from the wasterock pile and tracking all that.

Swent: Now is that impounded?

Koontz: It goes to the settlement ponds prior to discharge and is only discharged if it meets the permit criteria.

Swent: But acid doesn't settle out.

Koontz: No. That was just that winter that we started realizing we had a problem. It was just getting started because we didn't have much of a wasterock pile there at that point. I remember going down there one day. I was going down daily to take readings of the

ponds. I went down one day, and the ponds were kind of a chalky green. I took the readings, and I went down the next day, and they were red. I thought I was going crazy [laughs] because I could have sworn they were green the day before. The next day I go down, and sure enough the back half was turning green, and I just watched this line move towards me as the pond changes color. It was the most incredible thing I've watched down there. But it was just the change of pH coming through the pond. It was really interesting.

Swent: So what did you do there?

Koontz: Basically, I was keeping all the field data and reporting to Phil, who was at that point the one who was managing the water quality and working with operations to do what we needed to do to make sure we stayed in compliance with our permits.

Swent: You had been assigned a particular acid level that you had to maintain?

Koontz: You have to look at the pH in your creek, and you can't affect it more than .5 units upstream to downstream. So yes, you are somewhat restricted.

Swent: And what did the red and the green indicate?

Koontz: Just a change in the pH, basically. As you acidify it--you know, as you get your acid flush-through--it dissolves metals--iron being a part of that. As the pH starts to come up, iron is the first thing to settle out so you get this reddish orange floc [flocculent] in there which gives it that color. And then as the pH continues to come up, your sulfates then start to precipitate out, and that gives you your chalky greenish color in our case. So it's just a visual way of telling how your pH is doing.

Swent: Floc means flocculent?

Koontz: Yes, or just suspended materials in the water.

Swent: So what do you want? Red? Green? Chalky?

Koontz: Clear [laughter].

Swent: Ideally you want clear water.

Koontz: Yes.

Swent: So red or chalky green both signal--

Koontz: Yes, and that does settle out after your sulfates precipitate out then you do have your clear water. But you have to get to that point. So it was during that winter as we were collecting the data they started drawing up all the plans for the pump-back systems--the containment to pump-back waters that would not meet discharge quality.

Swent: Prior to that you had not been doing that.

Koontz: We had not needed to because we didn't have a problem up to that point. And we weren't projected to have a problem based on the original studies.

Swent: What had gone wrong?

Koontz: There was more sulfide in the rock, I guess, than what they had originally anticipated seeing. It was interesting work at that point to see and to really learn what was going on in the field.

Swent: Would this affect their metallurgy, their mill processing also?

Koontz: No, not really. I think that's part of what they do in the lab is track sulfide levels in the ore--in the blast holes--they send that material up here; they don't only analyze for the gold but also for the sulfides and that sort of thing. So they can adjust their lots and whatever they need to do to maintain a fairly constant balance there.

Swent: I'm just trying to figure out why you would be surprised at what the water discharged.

Koontz: In the original studies they had projected that we had sufficient neutralizing capacity in the waste rock to balance out the sulfides, and therefore should not have had as much of an acid mine drainage problem. In reality that balance (between acidification and neutralization) did not work out exactly as projected. To remedy the problem we developed the waste rock encapsulation plan, and installed pumpback systems to contain waters that do not meet our permitted discharge criteria.

Swent: Now we're continuing after a little break here. Is everything under control for you?

Koontz: Yes, it's fine.

Swent: Okay, good. After all, you're still on the job here; you're responsible for keeping the plant going, so we shouldn't take you away for too long.

You had recalled one exciting time with the leachate from the wasterock. Were there any other particularly interesting episodes when you were a tech?

Koontz: Back when I started getting involved with the bat work, that was probably the most interesting.

Swent: Let's go on to that then. We've covered water, and I guess the air is just a matter of catching the samples, right?

Koontz: Yes, it's pretty straightforward.

We use two types of samplers for collecting air quality samples. The TSP (total suspended particulate) sampler collects all the particles in the air regardless of size. The PM-10 sampler collects only those particles that are 10 microns in diameter or less--those that can actually be inhaled. These are standard samplers in the industry and are run on a six-day schedule. So every sixth day they run for twenty-four hours to collect the samples. The particles are collected on filters which are sent to our contract lab for analysis. The results are then compared to set standards for determination of compliance. Homestake has implemented practices during the dry season to ensure our compliance. These programs include watering the haul roads, applying magnesium chloride (a dust suppressant) to the roads, utilizing water cannons at the working faces in the pit, the installation of a wind fence, and installing sprinklers on the stockpiles.

The water quality after we saw the problem with the leachate, they went back, and we re-characterized waste rock and at that point they came up with a scheme to encapsulate selective placement of the waste rocks so that you could commingle your high acid-generation potential type of rock with your low acid-generation potential type of rock. And then encapsulate all of that with clay and topsoil in preparation for reclamation. There was a lot of work that came out of that to make sure that we have things back under control. And then the pump-back systems were installed to pump any water that does not meet discharge back up top for use in the process. Those were things that came about as a result of what we were seeing out there in the field out there.

Swent: This wasterock pile is at the mine, is it not?

Koontz: Yes.

Swent: And your pump-back systems are--?

Koontz: They're down below the wasterock at the sediment ponds.

Swent: Oh, I see. I was thinking--there's a pump-back up here also at the processing plant, isn't there? But you're talking about another one.

Koontz: Yes.

Swent: And that was something that they hadn't anticipated doing.

Koontz: Right.

Swent: I see. Changes.

Koontz: Yes.

Swent: All expensive.

Koontz: Yes.

Rescuing Townsend's Big-Eared Bats

Swent: Well, are we ready for the bats then?

Koontz: Sure.

Swent: When did you get involved with them?

Koontz: Let me cheat and look at my dates here [laughs].

Swent: No, no, that's not cheating at all. You have a very good timeline there. I'm delighted; that makes it much easier.

Koontz: Yes, 1987. Dixie Pierson and Bill Rainey. They were initiating a study for the Department of Fish and Game to look at *Plecotus townsendii*, which is Townsend's big-eared bat.

Swent: And Dixie and Bill are from UC Davis?

Koontz: Associated with Berkeley.

Swent: Associated with UC Berkeley.

Koontz: Townsend's big-eared bat is a species that they were evaluating to determine whether or not it should be listed with EPA as threatened or endangered. It wasn't even a candidate species at that time for listing. So Dixie had gone through the records--

Swent: What records?

Koontz: Just historic records.

Swent: I see. Not Homestake.

Koontz: Not Homestake, no. Historic records looking for old roost sites where they had been identified in years previous, and one of those sites was the old Manhattan Mine, which was the old mercury mine site that was here before Homestake took over the property. So she came up looking for the Manhattan and was very much amazed to find an open-pit gold mine operation. But she did stop in at the post, and they put her in contact at that point with Norm Lehrman, who was our chief geologist. Because she was looking for any open, old mercury workings that were still around. So they went out and did an initial site inspection of what was there, and she did find a few of the bats, so she was pretty confident that they were still around here. It was a matter of doing some additional tracking. So over the course of that year through the next winter, we checked out all the sites and did find the maternity--

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Swent: You found the maternity colony, you said.

Koontz: Yes, of about sixty or seventy females. They were residing in what was called the Zodiac workings, which was actually midpoint between South Pit and what would become the North Pit. At that point it was still very much an open tunnel, and they were residing in there. Unfortunately that was destined to become part of the open pit. The haul road ran right by the entrance. There were trucks going by, and there was drilling going on not too far away, and the bats were just merrily living in this old mercury working. We were totally unaware of it; they weren't identified as being here originally. So once we realized that they were there, we set out to find an alternate site for them because we were going to destroy the one they were using.

Swent: Excuse me--that's interesting because these D'Appolonia people had done this extraordinarily detailed study.

Koontz: Yes, but they didn't identify the bats using the area.

Swent: I hadn't realized that they had overlooked them.

Koontz: They had overlooked the bats [laughter].

Swent: That is a surprise, isn't it?

Koontz: It was. We were amazed to find out that this huge colony was living there. So we set out looking at all the other sites around the area. There was one open working not too far from Davis Creek just up on the hillside called Soda Springs, and that seemed to be the most likely site for relocation. We went ahead and gated that one; we designed a gate that would allow the bats to come and go but keep people out. And our crew up here at the mill went ahead and built that in place for us. We also gated another site out at the old Reed Mine. Historically, they had been known to roost out there but the old workings had slumped closed, so we went back in and reopened them and gated that site as well so that they would have a choice of sites to go to. While all this was going on, we had to redirect our mining so that we would avoid the site they were currently using until we could get them relocated. In May of '88 we went in, and we were watching with night vision equipment, waited until the bats left and then went in and made sure they were all gone and temporarily closed it off.

Swent: What is night vision equipment?

Koontz: Night goggles like they use in the service when they're out on night missions. It allows you to see at night. Kind of interesting equipment to work with. That way you can watch and see the bats exiting after dark that way. So once we were sure they were gone we did a visual check just to make sure and then closed it off temporarily. That kept them from returning. The next morning we went ahead--once we were sure they were all out of there and hadn't returned--and closed it off permanently and waited five days. They finally showed up at Soda Springs on their own. One of the other sites we had cleared out a couple months earlier during hibernation, and we had gone in and actually collected them while they were hibernating; we pulled about twenty of them off the wall and kept them in the refrigerator until that night--which is about the temperature that they hibernate at. It's not a true hibernation where they would sleep through the whole winter; they wake up every two or three weeks to go out and feed, depending on the weather patterns. So we kept them in a refrigerator [laughs]. That night we went ahead and weighed them and tagged them and fed them some mealworms and sent them on their way. Those were the first couple of sites that we closed off, and then the final site was the Zodiac which I just described a minute ago. But they did find the site that we prepared for them.

Swent: Was there no way of taking them there and showing it to them?

Koontz: We thought about that, but this particular specie is very sensitive to any interference or any interaction with people--if you go into a known roost site it can disturb them enough to make

them abandon it. We were afraid that if we took them there they would say, "Okay, they know where this place is; we're not going to go there." So we just decided they would know where it was because we had seen a few individuals using it. If we let them find it on their own they would probably be happier, and they did. Since then we put in monitoring equipment like you would use for burglar detection or whatever--it's sensitive to motion and temperature. As they come and go, we get actual counts every night of how many bats are coming and going. We collect that data year round--or I should say the researchers do, Bill and Dixie. It's proven real interesting in that respect. Their work did get them listed as a candidate species; this is only one of seven known sites where they now roost in the state. Another one of the sites is out at Sulfur Creek, or what was known as Cherry Hill--not too far north of here, on Homestake property. They (HMC) looked at it in the early days also. There are a number of old mercury mines out there.

Swent: Is it that they prefer mercury mines or just mines?

Koontz: Mines, tunnels, yes--this particular species.

Swent: Not mercury necessarily.

Koontz: No. It's just available habitat for them. We've also gated a couple of sites out there for a separate colony, so we have two of seven known colonies on Homestake property. It was a very long, cold night that night we excluded them (from the Zodiac)--I do remember that. We sat up all night to make sure they were all out and nobody was getting back in. The wind was blowing, and it was one of those spring days where winter wasn't going to quite leave, and of course it had been sunny two days earlier but now it was cold and windy [laughter]. It was a long, long night, but it was worthwhile five days later once we realized that they had accepted the site we had prepared for them.

Swent: It must have been very exciting.

Koontz: It was. It was nice to know that it had been a success. At this point, hopefully--if not this fall, then next spring--we will put in a hibernaculum for them. Or a hibernating site.

Swent: How will you do that?

Koontz: Well, we're looking at using--a creative use for the old haul truck tires. We're going to tie them all together to create a tunnel, and Dixie has helped us come up with a design to configure it so we can get different temperatures in different areas of it.

We're going to put that in and cover it all with dirt, put gates on the end, and hopefully the bats will use it.

Swent: An artificial cave.

Koontz: An artificial cave, yes.

Swent: These tires, we should say, are not little tires.

Koontz: No. They're a good twelve feet tall, maybe.

Swent: I think so.

Koontz: There's definitely plenty of space in there. So it would be interesting to see if they would accept that type of a roost site. It would be a good use for old tires also.

Swent: Yes. Does it have to be specially cooled?

Koontz: No, it should be able to cool on its own.

Swent: Just with the dirt over it.

Koontz: The dirt over it will help insulate it.

Swent: Do they not hibernate in the cave where they're living?

Koontz: A few of them do. During the fall, the maternity colony breaks up, and you'll find--I think the most we've ever found in one hibernating site was twenty, but that was a pretty extensive area. Usually you'll find less than five, whereas in the maternity colony--for this species--sixty to eighty is what we've seen here on site. So they break up, and they look for colder areas. And the one that we did gate for them has an upper level and a lower level, and they will use that lower level during the winter. But again, it's just a handful, and we still aren't sure where the rest of them go. We tried to radio track them--it must have been three, maybe four winters ago, in the fall--and we had a couple of them we were tracking, and we lost one--the radio must have fallen off because we couldn't pick her up. But the other one we did track for a few days, and he was just using boulder jumbles instead of--you know, I always expected this particular species in caves. We found him down below the old Corea property, down near the wasterock area one day, and then another day out at the Pinnacles, which is above Davis Creek reservoir out there. Some unlikely areas--that may be why we don't know exactly where they're going; we were looking strictly for caves or old mine workings.

Swent: Are you actually putting little radio sensors on the bats?

Koontz: Yes.

Swent: You can handle them to that extent.

Koontz: Yes.

Swent: You can catch them and tag them?

Koontz: Yes. The researchers do the handling, obviously, but they use what's called a "mist net". It's a real fine mesh net, and you can put that up over an entrance and collect them that way. Or if you find them inside, you could use a net like a butterfly net. You can collect them that way.

The battery's very tiny, like a watch battery size. It had a small antenna tail on it, maybe three or four inches long. You put that on with a surgical glue; it's something they can groom off within a day or two. You don't want to burden them with the radio. But we did find this guy again and get the radio back; they are kind of expensive. I know the researchers would love to do that again, and something we're hoping to do down the road is track them more and see where they're going.

We've also done foraging studies with them out at Sulfur Creek. It was an interesting evening; we had about fifteen to twenty volunteers--a good share of them from the mine, but also from Fish and Game [department] and researchers and just a wide variety of backgrounds there. We all had our lawn chairs and binoculars and dinner buckets with us. It's a broad, open valley, so we had stations all the way around. We all scattered out, and Dixie and Bill were working the main station, and we were all tied in with radios so that we could all report on what we were observing. They used those light sticks that you can use when you have an emergency on the road. You can bend them, and they turn green and glow. Have you seen those?

Swent: I haven't seen those, no.

Koontz: It's that type of material, and they just put it in these little bitty balls. Again, they used the surgical glue and put them on the back, and they look like these fireflies flying around. So they would release one at a time, and we would just watch them forage the oak trees--these are moth specialists. We would watch them until they decided to pop over the ridge, and then we would release another one. But we spent all night doing that.

We have two other colonies--two other species--that are living here. The old trailer down at Davis Creek that was used by the earlier groups doing archaeology or research has been taken over by a myotis colony.

Swent: Is that a different kind of bat?

Koontz: Yes, a little brown bat. Probably five to seven hundred in that colony. And then we also have a pallid bat colony that uses the old--I'm not sure if it was an explosive storage bunker or a shower facility or what, at the old Reid mine. It's a cement building down there that they will roost in. It's been real interesting work. I've enjoyed that.

Swent: You've become a bat expert without intending to.

Koontz: Yeah, really. Once Homestake gated, they (researchers) had a lot of success in getting other mines as well as the Forest Service and--you name it--to realize that now this is a feasible way of dealing with it, because of the big push to close all the old workings. They're getting people to assess them from a habitat standpoint before they close them, and gate them if they are a habitat and if not, then [fine?] close them, rather than sealing bats in, or the other animals that might be living inside. So we were kind of in the forefront on that, and it was kind of nice to see--

Swent: Are you aware of similar work that's being done in Wisconsin?

Koontz: No. I know some of the work that's being done in the Southeast, but not in Wisconsin.

Swent: I heard a paper that was given by some people who had saved some bat colonies in Wisconsin, in the mines of southern Wisconsin. I'm not sure whether they did this before; it seems to me that they did it after Homestake did. Maybe they had learned from this. I'm not sure if there was a connection or just an independent development.

Koontz: Bat Conservation International, which is out of Texas, came out and did a photo session here, and Dixie wrote an article for them, and that's where it started to spread. And then just through some of their technical and professional papers they've done--so I'm not sure if that was tied in or not.

Swent: We think here of these visits being the pioneer development; I think perhaps it was.

Koontz: There was a little gating tried on some caves down in the Southeast area, but mining companies as far as I know had not gotten on the bandwagon at that time. They were pretty much in the forefront.

On permitting--there are little permitting things that come up--mainly it's--

The Continuing Need for Permits

Swent: I was surprised by this; I thought that permitting was all back in the past.

Koontz: No, that was original permitting. Over 350 permits at that point to get things rolling. But over the years, as operational needs change, we go back for permit modifications. Two years ago we did the North Pit backfill permitting which allowed us to place wasterock back into the North Pit once we were done mining there. Then about six to eight months after we had those permits we went for the South Pit backfill--basically we just reconfigured the North Pit backfill and put a portion of that in the southern end of the South Pit. It provided more space for wasterock without extending our main wasterock area further on to undisturbed lands, which we were permitted to do but we were trying to minimize the impact. And it's allowing us to rebuild the North Pit back up. It's kind of interesting to see that developing. It's nice to see, actually.

Swent: Do you just dump it in, or do you have to compact it?

Koontz: It's end-dumped over, and then we re-slope. We do it in hundred-foot lifts which we reclaim. It's re-sloped at a two-and-a-half-to-one slope. It's encapsulated with clay, and that's re-sloped. Two and a half to one is about a 40 percent slope.

Swent: That's the ratio of--

Koontz: Horizontal to vertical. And we encapsulate that in clay, and then once that's reduced to 40 percent slope we go ahead and end-dump all the topsoil which has been stockpiled, which is down at Davis Creek. All that topsoil was scavaged prior to the filling of the reservoir so that we could use it for reclamation.

Swent: Scavaged? That's a new word for me.

Koontz: Is it? They went out and took all the topsoil off and put it in stockpiles and reclaimed it for later use so that it wasn't sitting under the reservoir unused. We've done that in a number of other areas. We have one out here at tails [the tailings site], and there are a couple of smaller ones around the mine site. So the topsoil is then redistributed over the wasterock, and we go ahead then that fall--the same year it's completed--and have the hydroseeders come in and seed it and by spring we have nice green slopes.

Swent: So what is your involvement then with this?

Koontz: It's been the past five years--that's when Phil transferred to Lead, and I took over the reclamation work here. I basically go out for bid on the contract and come up with a contract hydroseeder to come in. We're in the process right now of reclaiming about forty-five acres.

Swent: So you've been promoted now from technician to--

Koontz: No. I just have different duties [laughs].

Environmental Technician, Then Engineer, 1988

Swent: I see. But you were promoted--you hadn't mentioned that.

Koontz: Yes. In May of '87 I was environmental technician, and then in December of '87 I was junior environmental engineer. By the summer of '88 I was promoted to environmental engineer. In December of 1995 I was promoted to senior environmental engineer.

Swent: So you're in charge of the whole bailiwick then.

Koontz: No. I do water quality, geotechnical, wildlife, reclamation, some of the permitting and interaction with operations personnel on all those issues. And then our other environmental engineer--

Swent: What else is there? [laughter]

Koontz: There's air quality and hazardous materials that our other engineer [Jim Jackson] takes care of.

Swent: Who decided this division?

Koontz: Air quality and water quality kind of naturally fall apart, for some reason, into separate areas. I was doing geotechnical, and I

really enjoyed the wildlife, and I was very much interested in the reclamation. So that's kind of how it came about. He was more interested in hazardous materials. So when that time came he took that on. It's just kind of fallen into place for us, I guess.

Swent: Prior to that had it been divided the same way?

Koontz: Pretty much so. Phil took over the management--or he had the management on the programs for the most part--whereas I was working with reporting and data and fieldwork. And then John Lawton, our other engineer at that time, was doing the air quality. So it's somewhat similar--just a little shifting of duties there.

Swent: It evolved according to your tastes or capabilities.

Koontz: Yes, and the needs of the project.

Swent: So now there are two engineers.

Koontz: Two engineers and a technician and an environmental manager.

Swent: Ray is the--?

Koontz: The manager.

Swent: So you report to Ray?

Koontz: Yes.

Swent: And you've had this job for five years.

Koontz: Well, I've been in environmental since '87, and an engineer since June of '88.

Swent: Oh--seven years. How has it changed or progressed in those years?

Koontz: Five years ago was when Phil left, and that's when we started rejuggling some of the duties. Jim and I took on more of the administrative type of duties associated with our personal areas of responsibility and then transferred all the fieldwork we were doing in conjunction with that to our technician. So when we lost Phil we picked up a technician and just shuffled things around. It's worked out real well that way.

The Flood of 1994

Swent: Tell me how you spend your time then.

Koontz: It depends on the season [laughs]. This past winter it was all in the field, trying to keep track of where the water was going. We had 178 percent of our normal precipitation. Of course, everybody who lives in California knows that we've flooded twice this year, and it was a challenge.

Swent: You had what--a hundred feet of water in the pit?

Koontz: We did. We wound up with a hundred feet of water in the pit, which took us several months to pump out and just trying to keep everything in compliance. We were pumping some of the water out to tailings for containment so that we weren't overtopping into the pit from our M-1 storage pond. It was a real juggling of everybody's time.

We put in parallel pump-back systems to upgrade the pumping capacity from the sediment ponds below site five so we could contain water that didn't meet discharge criteria. Overall, we came out real well in the end. There was no impact to the creek. It was definitely day-to-day keeping things going and getting things put in place out in the field so that we could do that.

Swent: Am I correct that you had to get special permits then to pump the water out?

Koontz: Of the pit?

Swent: Yes.

Koontz: No, it was pumped back up to our M-1 storage pond which sits just off to the side of the pit itself. And then there it gets drawn into the grinding facility and used for the water there and just winds up out at tails. It's all recycled, and contained on site.

Swent: But you had a little more than you needed for a while.

Koontz: We had more than we wanted, yes [laughter]. Definitely. We were ordering pumps left and right, and more pipe.

Swent: It was nice, clean rainwater though, wasn't it?

Koontz: Some of it was, and then what was coming off of the active area of the wasterock area--the area that hadn't been reclaimed yet--that doesn't typically meet discharge quality because of the acid

generation potential in that rock. Anything that comes out of the pit comes in contact with the sulfides, so that doesn't meet discharge criteria. So all that has to be contained on site, and the best way to do that is to use it in grinding. After it's gone through the process up here in the mill, and it's discharged--all the metals of course are bound up, and we have pretty decent water out at tails.

Swent: You were not doing rain dances?

Koontz: No [laughter], definitely not.

The Annual Environmental Report

Koontz: Then during the summer months, almost all my time is dedicated to getting the annual environmental report out. It's about six inches of paperwork; it's three volumes. Some of that are reports that are submitted by researchers or contract people. But for the most part it's us looking at our data that we've reported throughout the year to the agencies, but this is where we sit down and look at it and decide if everything is going according to plan or if there are areas where we need to improve things to make sure that we're staying on top of everything.

Swent: What's your deadline for that?

Koontz: That has to be in their hands October 1.

Swent: Standard government year. And "in their hands"--who is "they"?

Koontz: That would be the three counties, all the state agencies that we deal with, as well as federal agencies we deal with. We also distribute it to people at TRP--Technical Review Panel--and anybody else who might be interested in it.

Swent: Can you do pretty much the same reporting for everybody or do you have to have specially tailored reports?

Koontz: No. We incorporate everything into one report and distribute that way.

Swent: They can pick and choose what they want.

Koontz: Yes. We cover all the monitoring in that.

Swent: And that's six inches.

Koontz: Six inches of paperwork, yes. There are a lot of bookshelves in the county offices that have just Homestake reports on them.

Swent: So you're just coming up on that deadline right now.

Koontz: No, it was mailed out--

Swent: Oh, it was October--right.

Reclamation Work: Planting Pines and Oaks Each September

Koontz: And then the first part of September is when we start reclamation. That's usually done within a month. We ran into some problems this year with getting decent straw and had high winds this year, which has slowed the crew down a wee bit. Then once they're gone, we have a woody species planting program that I've developed over the last few years where we're collecting the seeds on site and doing direct seeding instead of growing nursery crop and installing seedlings. It's been real successful; we've used several types of oaks and black walnuts. It's been real successful. This year we're going to try some digger pines and some coffee berry. It depends on what kind of seed crop you have for a given year. Last year was a bumper crop for acorns and this year there just aren't too many. So we're going with diggers, which are producing like crazy [laughs]. It's a low-cost way of reintroducing woody species to your reclaimed areas, and it seems to have a very high success rate or survival rate--equal to or greater than what you would have with nursery stock plants. We've been real happy with it.

Swent: The oaks and the digger pines are in a completely different group, aren't they?

Koontz: You get some intermixing.

Swent: And you're just planting the seeds?

Koontz: Just the seeds. We do that Decemberish, after we've had some rains to moisten the soils. By spring they're popping up.

Swent: Do you protect them?

Koontz: Yes. The first year we did a test plot; we were using just wire-mesh screens like you typically see on plantings. They have come out with these tubes now, which you're seeing more and more--they come in various heights, and they're photodegradable after five

years. So we tried those out this past year. It's supposed to increase the survival rate and the growth rate, and so far I've been real impressed with the way they've done. Especially the black walnuts.

Swent: Are they plastic?

Koontz: Not really--yes. It looks like plastic. It's just a tube. In fact, there are some black walnuts out there that are three feet tall in the first year. And then we go right back into winter again, and the cycle starts over. Whereas for our other engineer, it's the summer months when he's the busiest with air quality.

Swent: When is your busiest time?

Koontz: Winter is definitely the busiest time--and our technician's busiest time--taking all the discharge samples and tracking all the readings in the ponds for us so we know how to manage things.

Renewing the NPDES Discharge Permit, 1993

Swent: Other than the flood and the pH, what other crises have you faced?

Koontz: Oh, there has been one major one that comes to mind [laughs]. This was in '93.

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Koontz: In '93, we submitted our application for renewal of our NPDES discharge permit, which is just a standard renewal with the state water board. It was slow on their end getting things going. By the time we finally got to the point where they were getting ready to go out for public notification, they received this letter from a group called LASER--Legal and Safety Environmental Research. They were interested in any permits that they may be issuing to Homestake and wanted a chance to review it along with the rest of the public, so copies were forwarded to them.

Swent: Where were they?

Koontz: That particular time it was from a fellow in Oregon. I think he was in Portland, but I could be wrong about that. Nothing came of that, but the water board did not get the public notifications out in time for the upcoming board hearing, so we had to go through the process again. This time, the guy from the Sacramento office of LASER got involved because the other guy had not responded. We

kind of called, just checking to see--you know, interested in LASER. "What is LASER? What do you guys do?" It turns out that --after a lot of digging--we found out that they are backed by the labor unions, and they target industry that does not use labor contractors. So Homestake was on their list [laughs].

Swent: Of course.

Koontz: So basically, they use this front of being environmentally concerned about what's going on and just wreak havoc with the permitting process. It's basically a blackmail scheme. We do know of another mine, the Hayden Hill Mine, that was faced with this, and they (LASER) finally bought off by agreeing to hire a certain percentage of their contractors from the labor union groups. And they finally backed down on challenging their permit. But of course, we were not going to be blackmailed, so the struggle started. After getting lawyers and consultants and everybody else involved, we finally went to hearing and the things this guy was coming up with--you know, these mystery pits. They were sediment ponds; he had all these pictures, he kept trespassing on our property and collecting samples here and there and claiming--you know, we had no idea where he had really taken the sample from. And he came up with these analyses that were totally unrelated to our historic database (thirteen plus years of data) or what we were doing here. We got through the hearing, and they agreed to approve our permit as applied for, but it was a real struggle. It was really amazing to go through that, to see how much people will just go through to blackmail a corporation--

Swent: Were you testifying at all?

Koontz: No, I worked with the consultants and the lawyers on the reports. They were the ones who got up and testified. We let them handle it. Ray was fit to be tied because he couldn't get up and testify because of his involvement at the state level, you know.

Swent: Oh, yes. He's on the State Mining and Geology Board; I guess that would be a conflict of interest, wouldn't it?

Koontz: He very much wanted to get up there and say something [laughs].

Swent: Yes, I'm sure he did.

Koontz: He was having a hard time with that one [laughs]. But we did get it renewed, and that's probably been the other big struggle I've seen around here.

Swent: That's a matter of public record, I'm sure--all these things are.

Koontz: Yes, it is. They were going to challenge the award of the permit. They threatened the water board that if they don't do something they were going to go ahead and challenge things. They (Water Board) went ahead and gave us the permit anyway, and we haven't heard from them (LASER) again [chuckles].

During the start of this, they actually had him come on site. Upper management took him around and talked to him. He brought along--

Swent: Who is "he"?

Koontz: Oh, what's his name? I'm amazed I've forgotten it. I thought it was a name I would never forget.

Swent: You're repressing it [laughter].

Koontz: Yes, maybe I am.

Swent: Is he a company lawyer?

Koontz: With LASER. The LASER gentleman from Sacramento.

Swent: I see.

Koontz: But he did come up to the site for the tour, and he had several labor union people meet him here. I guess by the end of the tour --I wasn't involved with it--but from what Ray said they (labor union people) were pretty well distancing themselves from him because he was being so aggressive and really didn't want to listen to reasonable explanations of things. So in that respect it was good. I can't remember who was involved--they asked him off the record why he was doing this, and it was basically because Homestake had not hired from the labor union group.

Swent: A different agenda.

Koontz: Definitely, yes. Other than that everything is just day-to-day.

Swent: What would have happened if they had denied the permit?

Koontz: Well, we would have continued under our other existing permit. That's one thing the water board staff did bring up during the hearing--that even if this was denied, Homestake would continue to operate under the old permit until we could come to an agreement on a new one. So it wasn't like he was totally preventing us from having any operating permit to work with. He was just delaying the renewal, which was already behind schedule anyway because of the scheduling of the water board.

Swent: But it could have shut things down, I suppose.

Koontz: No, we just would have continued to operate under the other permit. The water board had agreed to that.

Swent: Still, it's a little frightening, isn't it?

Koontz: It was, to see what people can really do when they have an ulterior motive.

Swent: Any other--

Koontz: Nothing else major comes to mind.

After the Mine Closes, What?

Swent: So what do you anticipate?

Koontz: Good question. Obviously mining will be done sometime between now and next summer. We've already been told we'll be reduced to about a hundred-person operation from our current 330 or 350-- somewhere in that range.

Swent: As soon as next summer?

Koontz: Yes. The mining portion will be done, and then they will continue to operate off the stockpiles until about 2004. That's what they're projecting right now. It's going to mean a lot of changes for a lot of people.

Swent: How will it affect your husband's job?

Koontz: His job will be eliminated along with the other people in the mine, I'm sure.

Swent: When they stop mining, his job--

Koontz: They're not sure how long it would take to finish things up for reclamation into the fall, and if so, how many surveyors they would hang onto at that point.

Swent: Does he have seniority?

Koontz: Actually, the other surveyor has been here a year longer. They've both been with the company about seventeen years.

Swent: A long time.

Koontz: Yes, it is.

Swent: And your job will continue though, I suppose.

Koontz: Yes. The environmental department, at least from what we know right now, will probably continue at least for another year with the staffing we have--a year beyond the shutdown.

Swent: Of the mine.

Koontz: Yes, of the mine. At that point--a year beyond that, they're still going to have to have the environmental staff. We just don't know if it will be four people like we have now, or if they'll reduce that or not.

Swent: I think they'd need some--or all of them--until the very, very end.

Koontz: Oh, yes, they will. Definitely.

Swent: And where do you stand in the seniority line?

Koontz: I think it's kind of a toss-up at this point. There's uncertainty on the horizon.

Swent: Very definitely.

Koontz: We'll just prepare for it. In mining there's always that uncertainty on the horizon somewhere along the line [chuckles].

Swent: That's true. I've heard mumblings about the housing market also. People are selling their houses.

Koontz: Yes, to beat the rush. Of course the market's real slow up here right now because there are so many homes for sale--just driving around I'm sure you've noticed all the "For Sale" signs.

Swent: Yes. Have you made any plans on that?

Koontz: Yes. Actually, we're closing next week on our house, and we're going to rent until it's over with. We just decided to beat the onslaught of everybody else putting their houses on the market.

Swent: So you're selling.

Koontz: Yes.

Swent: Are you going to rent the same house?

Koontz: No. We have one about three miles from where we are that we're going to rent. We just decided to try to beat the market. We've been on the market for a year; it took us a year to sell. At the time we put it on, our realtor told us there were 3,000 homes for sale in the county.

Swent: Oh, my. I thought perhaps some people will--well, I imagine some will--keep their houses and just keep staying here as a nice place to stay.

Koontz: A number of people who were born and raised here and definitely don't want to leave, and some of them are finding other work. We have one guy who just is getting ready to open a restaurant. Another one is looking at a restaurant business. One who just recently opened a computer store in Lower Lake and has his wife work during the days and he's taking care of it on the evenings and weekends. The people who want to stay in the area because they like living here are finding ways of doing it. The rest of us are looking down the road at other options.

Swent: Do you have children?

Koontz: No.

Swent: That gives you more flexibility and more mobility.

Koontz: Yes, it does.

Swent: It's hard to plan, though, isn't it?

Koontz: Yes, it is. But we look at it as an adventure, you know?

Swent: Are there opportunities with Homestake?

Koontz: I think the next thing that will come on line is Ruby Hill out in Nevada, near Eureka. Last I heard--I'm really not sure on the scheduling--there may be some gap between closedown here and startup over there. I haven't heard any recent news on that. And there are a couple of other smaller properties that I know Homestake is looking at in Nevada.

Swent: Is Homestake doing anything positive in this? Are they talking to you about--

Koontz: Yes, they've kept us apprised of what's going on. They've started--about a year ago, I guess--what they call the "Breakfast Club" meetings for middle-management people, since upper

management obviously meets once every couple of weeks. It is an informational exchange not just from upper management to us so we can disseminate it to the rest of the group, but also interaction between the departments. In environmental, we're involved with everybody, but some of the other departments are a little more isolated and don't really know everything that takes place on other parts of the property. So I think that's been positive. At least it's made people feel like they're in the loop and being kept informed. And I know that they're going to start--Don Fields, our personnel manager, is starting to pull together a group to help place people, to help them search for jobs, and I guess write résumés or whatever. And they're going to try to shoot for 100 percent reemployment for the employees. So yes, they are doing things to try to help out in the transition.

Swent: So you feel that you're not just being shut out.

Koontz: No. I think they're handling it well.

Swent: Outplacement, I guess, it's called.

Koontz: Yes.

Swent: It's a euphemism, isn't it?

Have there been opportunities for--I don't even know the word--professional advancement or studying? Obviously you've learned a great deal on this job.

Koontz: On the job there's a lot.

Swent: The local college or anything? Is that--

Koontz: The local college--I know several people who have picked up associate degrees there.

Swent: Have you personally had any opportunities for--

Koontz: Not in a local college, no. If you want to go to Davis or to one of the universities they will pay for any schooling that's related to the job.

Swent: Oh, really? Have you taken anything like that?

Koontz: No, just basically seminars.

Swent: But there have been those?

Koontz: Yes, off and on they'll give seminars. They'll send you off to one. Everybody gets a little bit of an opportunity there to get out and see what other people are doing.

Swent: What have you done personally?

Koontz: It's been a while since I've done anything off-site. I can't remember the name of it now--there was one in Reno that I went to several years ago and just listening to the work that's being done by some of the researchers in water quality. That was very interesting. I also co-authored a paper with Bill and Dixie on the bats. Dixie presented it--but I was with her--in Snowmass, Colorado. The Thorne Ecological Institute put on a seminar for impacted wildlife, particularly with mining or any type of development is what they were pinpointing. Again, it's nice to see what other people are doing right now. Those are two big ones that come to mind. And just meeting with other mine operations personnel or environmental personnel--I was down to the Sonora Mine while they were still operating.

Swent: In Jamestown?

Koontz: Yes, in Jamestown. That was definitely a different setting to have the town right there surrounding the operation. And then talking with people--we had the environmental director from--[laughs] now it's going to escape me--it's the mine that just closed down recently up in the foothills, and they're doing the final closure on it.

Swent: Royal Mountain King?

Koontz: Yes, Royal Mountain King. It's interesting to hear what they're dealing with because ultimately many of those things we'll be dealing with here just putting things to rest. After shutdown, reclamation will accelerate for a while as we decommission facilities and reclaim those areas. So there will kind of be a shift of focus there.

Swent: I believe Royal Mountain King is spending more to reclaim than they spent to develop, aren't they?

Koontz: They're spending quite a bit, yes.

Swent: It's not a simple matter; you don't just walk away from it.

Koontz: No. There's a long-term liability there, and it takes a lot of planning.

Swent: What else do you have on your list?

Koontz: I think that covers the big items. Reporting the monitoring we've basically talked about; Davis Creek reservoir--

Swent: You didn't say much about that.

Koontz: A lot of that's the aquatic ecology research that's being done. This is Ecological Research Associates that do that--do the water quality as well. Basically we do have mercury in the reservoir--the study is now after ten years they are proposing to just focus strictly on the mercury whereas before it was looking at all the metals. They've obviously pinpointed the fact that it is just mercury that is of interest down there at this point. Of course, you find that (mercury) in all the regional lakes in the Coast Range. Although mercury does not show up in the water analyses at the current detection limits, it does make its way into the food chain through a methylation process that is not fully understood. Occasionally following heavy storms you may see a small amount of mercury in a total metals analysis due to the suspended particles that are transported in the water during those events. The mercury, in that case, which is detected is a result of the native elemental mercury--cinnabar--being transported in the water. The cinnabar settles out after storm events, and is deposited in the reservoir. Filtered metals samples collected during the same storm event will not detect mercury in the water. Its presence in the water is a result of the transport of particulates from the native rock in the region.

Swent: It's in the ground.

Koontz: Exactly. Especially when you have old mercury operations not too far away. Again, that ties back into TRP, the Technical Review Panel and that entire group.

Swent: So they're expecting you to remove the mercury or contain it or--

Koontz: Basically it's being contained by the reservoir being there, you know, as it's brought in. It settles out. They're still not sure how the methylation process works to bring the mercury into the food chain. Just by the fact that we allow the cinnabar to settle out by having the reservoir there is a positive effect on the downstream waters.

Swent: So you may be actually improving over nature.

Koontz: Yes, over the downstream, what was there originally. I think so.

Swent: What about the Reed Mine cleanup? Didn't they do a lot of that?

Koontz: Yes. I think that's the first summer I came into the department, and the two summer students we hired that year--one of them was an environmental studies major--they gave the program to them for that one. And they basically did an entire Davis Creek watershed survey to try to pinpoint where all the mercury was coming from. Obviously most of it was coming from the old mercury sites; the Reed Mine and the old Harrison Mine both drain into that basin. So once they had the study done we then went back in and re-topsoiled the calcined tails, which was spent ore and which are on the hillside there. The contaminated soil that was found up around the cooling tower area, that was disposed of (as allowed by regulations).

Swent: How would you dispose of it?

Koontz: I wasn't involved with that; Phil was handling that so I really don't know a lot of the details on that one. It would have had to have been according to regulations. Once we had that covered with soil it's been doing real well.

The other big item we did was we sealed off the old adit. There was an open adit right at creek level which was draining into the creek. (A separate adit from the one we gated for the bats.) This past winter we've started to see some seepage again just because of the incredible amount of recharge we received this past year, but it's definitely not the volume of flow that we were seeing before the plug was put in. It was regROUTed at one point to reduce any minor seepage that was coming through at that time, but that has had a positive effect on the metals going in. They've (Ecological Research Associates) shown that in their Davis Creek studies.

Swent: Someone pointed out the Reed Mine to me once, and it was up on the hill. But the adit is at creek level.

Koontz: It's at creek level. And then if you go up the old roadway maybe half a mile, there's an old open-pit area, and there are some open workings up there that tie in down to creek level. So it was really a fairly extensive operation. The processing was done right there at the northwest arm of Davis Creek reservoir--what is now Davis Creek reservoir.

Swent: When there's mercury in the ground like that, the normal ground seepage--the runoff--would have mercury in it whether or not they were mining, wouldn't it?

Koontz: You're going to get mercury from the cinnabar--you know, the small pieces that come--

Swent: So it isn't entirely because of the mining that you would get mercury in the water.

Koontz: No. It's native in the area.

Swent: But I suppose more if there's mining?

Koontz: I kind of think it is more in the sense because that is where the concentration was, and that's why they were there mining in the first place and so on. That may be why you see more.

Swent: Okay, well, I can't think of any other questions. I'll probably think of some later. Can you think of questions I should ask that I haven't? Are there areas that I've missed?

Koontz: I can't think of anything right offhand, no.

Swent: It seems to me we've pretty well covered everything.

Are they going to harvest the walnuts?

Koontz: Yes, except this year we're doing diggers (pines). Our department does that. It really doesn't take too long to collect them. In fact, right now I'm still soaking some digger pine seeds for storage.

Swent: For seeding?

Koontz: For seeding, yes.

Swent: The acorns you just pick up.

Koontz: You have better success collecting them from the trees. They need to be stored in a plastic bag and then put in a refrigerator. If they lose moisture that's when you lose your viability on those. Whereas some of the other seeds, you have to keep them in cold storage for certain periods of time; others need heat treatment--like some of the cypress will not reseed themselves unless a fire comes through the area. So it just depends on what specie you're trying to plant as to how you need to treat them.

Swent: Now we haven't mentioned fire; I guess there have been no fire problems here?

Koontz: No.

Swent: I knock on wood as I say that.

Koontz: Along about '87 or '88 they did clear a large chaparral area just north of the oxygen plant and revegetated that with grasses to reduce the fuel load. The Onstads graze the cattle, which also reduces the fuel load for us. We have a helipad at this end and also at the mine end, and we maintain all the roads for access as well as firebreaks.

Swent: That's under your jurisdiction also?

Koontz: Yes. We try to minimize the potential there, but we are in the Coast Range, and it does burn.

Swent: Yes, I'm so aware of that now [recollecting the Oakland Hills Fire]. Well, I think that's just about done it, if you're satisfied.

Koontz: Yes. I can't think of anything else right off the top of my head.

Swent: Well, I certainly thank you.

Koontz: Sure.

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APPENDIX A

McLAUGHLIN MINE

Homestake
Mining
Company
Annual
Report
1979



X. cg

Exploration Division

Homestake has intensified its efforts to expand the company's position as the country's largest domestic gold producer. Exploration and development activities seeking new sources of other minerals for our portfolio of mining businesses also continue, but the principal focus is on gold.

During 1979 some \$12 million was spent on exploration and development work, nearly twice the amount spent the prior year, and our 1980 budget will be even higher. The 1979 program succeeded in identifying several prospects with low-cost open pit mining potential, plus two underground mining targets.

In 1980, we are moving into more advanced exploration activities at two promising gold prospects in the western United States and one in Central Australia. We also have identified one gold/silver and two silver prospects in the western U.S. These prospects are in different stages of evaluation. All are being pursued further in 1980.

Homestake's decision to place strong emphasis on gold exploration was made in 1977. It was based largely on the fact that gold exploration in the United States had been essentially at a standstill since before World War II. Many gold mines had been closed on government order during the war, and after hostilities ended most of them remained closed. Some had flooded, some had burned and in any event the price of gold was fixed by the U.S. government and therefore provided little or no economic incentive to reopen the mines or carry on new gold exploration.

Meanwhile new exploration

techniques had been developed during the post-war years as mining companies explored for uranium, copper, lead/zinc and silver. Homestake is adapting many of these techniques to the search for gold in the western U.S. and also, to a lesser extent, in Australia. The strong upward movement in world gold prices in late 1979 and early 1980 provides further incentive.

Exploration efforts on silver were primarily concentrated on evaluation of Homestake's 50 percent interest in the Bachelor Mountain deposit near the Bulldog silver mine in Colorado's Creede Mining District. Close-spaced drilling to establish mineable ore reserves, advanced metallurgical testing and preliminary mine planning and design will be conducted in 1980.

While the primary focus of exploration activities is on gold and silver, Homestake continues its efforts towards uranium, lead, zinc and copper discoveries. Uranium exploration is the responsibility of the Energy Division. Lead/zinc reconnaissance is carried out in southeastern Missouri. Copper exploration is carried out primarily through a joint venture with American Copper and Nickel Company, in which Homestake has a 60 percent interest. The venture's copper prospect in the Keweenaw Peninsula of Northern Michigan is being held pending future developments in the world copper market.

A key element in exploration success is management and technical support in the search for precious metal deposits. Homestake's professional geologists, engineers and technicians operate

on a functional basis, directing specific skills against specific targets on priority assignments, rather than the more common approach of assigning area responsibilities to district managers. In 1979 over 400 precious metals opportunities were screened and evaluated in our company-wide exploration effort.

Exploration Division activities are directed from corporate headquarters in San Francisco, with field offices in Lakewood, Colorado; Reno, Nevada; Lead, South Dakota; and Adelaide, Australia. Temporary field offices are added as needed to support project efforts.

The Energy Division maintains exploration offices in Albuquerque, New Mexico; Gunnison and Lakewood, Colorado; Casper, Wyoming; and Spokane, Washington.

Board of Directors

Harry M. Conger
President and Chief Executive Officer
Homestake Mining Company

Donald T. Delicate
Retired, former Senior Vice President
Homestake Mining Company

Douglas W. Fuerstenau
Professor, Department of Materials
Science and Mineral Engineering,
University of California, Berkeley

Clifford V. Heimbucher*
Retired Partner, Main Hurdman &
Cranstoun, Independent Accountants

Paul C. Henshaw
Chairman of the Board
Homestake Mining Company

John R. Kiely
Executive Consultant
Ectel Corporation

Wallace Macgregor
Independent Metals and Minerals
Adviser

Leonard Marks, Jr.*
Executive Vice President
Astle & Cooke, Inc.

Donald H. McLaughlin
Retired, former Chairman
Homestake Mining Company

J. J. Salisbury*
President
Salisbury Corporation

Erne A. Schepman
President
Envirotech Corporation

Richard J. Stoehr
Senior Vice President
Homestake Mining Company
Member of Audit Committee

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Chairman of the Board

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Richard J. Stoehr
Senior Vice President

James A. Anderson
Vice President

Kenneth S. Canfield
Vice President

Thomas J. Connolly
Vice President

Richard R. Hinkel
Vice President

Martin M. Koffel
Vice President

Angus W. Swent
Vice President

Howard C. Harvey
Treasurer and Secretary

Jonathan J. Williams
Controller

Charles R. Thurman
Assistant Secretary

Corporate Legal Staff

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William G. Langston
Corporate Counsel

Dennis B. Goldstein

John S. McMunn
Assistant Counsel

Operating Staff**Gold Division**

Thomas J. Connolly
General Manager
SAN FRANCISCO, CALIFORNIA

Gale A. Hansen
Manager, Technical Services

Joseph P. Giurlani
Marketing and Business Manager
HOMESTAKE MINE
LEAD, SOUTH DAKOTA

Allen Winters
Manager

Ralph J. Tibble
Assistant Manager
BULLDOG MINE
CREEDE, COLORADO

Thomas M. Robertson
Manager
HOMESTAKE GOLD LTD.

John Roberts
Manager

Base Metals Division

Martin M. Koffel
General Manager
SAN FRANCISCO, CALIFORNIA

Takefumi Maene
Manager, Raw Materials and Planning

Janet Juras
Manager, Metal Sales
SPEARFISH, SOUTH DAKOTA

Donald L. Templin
Manager,
Homestake Forest Products Company

Energy Division

Kenneth S. Canfield
General Manager
SAN FRANCISCO, CALIFORNIA

Kurt Gilg
Manager, Uranium Mining and Milling

Richard A. Holway
Manager, Uranium Marketing
GUNNISON, COLORADO

George J. Simchuk
Manager, Pitch Mine
LAKEWOOD, COLORADO

Robert D. Adamson
Manager, Uranium Exploration

John Ransone
Manager,
Technical Services — Uranium
GRANTS, NEW MEXICO

United Nuclear-Homestake Partners

John M. Parker
Manager

Exploration Division

James A. Anderson
General Manager
DENVER, COLORADO

T. M. Rizzi
Manager, District Exploration
RENO, NEVADA

Donald L. Gustafson
Manager, Target Exploration

J. Kenneth Jones
Manager, Reconnaissance
ADELAIDE, AUSTRALIA

John Roberts
Manager of Exploration, Australia

Compania Minera del Madrigal

John H. Schissler
General Manager

Office of Corporate Development

Richard J. Stoehr
Senior Vice President

A. Bailey Cozzens
Manager, Business Development

Lee A. Gruber
Manager, Corporate Planning

Officer and Director Changes

Charles F. Corbin, Vice President
and a member of the Board of Directors
since May, 1972 retired as an officer
and director effective January 1, 1980.
Mr. Corbin will continue serving the
Company on a consulting basis.

Donald T. Delicate, Senior Vice
President and a member of the Board
of Directors retired as an officer of
Homestake but will continue serving
as a Board member.

Martin M. Koffel was elected to the
office of Vice President on July 13, 1979.
Mr. Koffel is General Manager of the
Base Metals Division.

Major Subsidiaries

Compania Madrigal
Homestake Australia, Limited
Homestake Forest Products Company
Homestake Gold Limited
Homestake Lead Company of Missouri
Homestake Smelting Company

Corporate Office

Homestake Mining Company
650 California Street
San Francisco, California 94108
Telephone 415-981-8150

Transfer Agent and Registrar

First Jersey National Bank
One Exchange Place
Jersey City, New Jersey 07303

Exchange Listings

The Company's common stock is listed
on the New York Stock Exchange and
in Switzerland on the Basel, Geneva
and Zurich stock exchanges.

APPENDIX B

DONALD L. GUSTAFSON

DONALD L. GUSTAFSON
3420 Norman Drive * Reno, Nevada 89509 USA
(702) 322-9951

OBJECTIVE - MINERAL EXPLORATION & RESOURCE APPRAISAL

Provide professional consulting services for private industry, government agencies and investment groups. Evaluate prospects and advanced stage projects, both domestic and international, conduct regional exploration programs and complete country profiles.

SUMMARY

Twenty-five years experience in mineral exploration in the USA, South Pacific, Asia, Central and South America including project generation, evaluation, mining, economics and country assessments. Established and implemented successful exploration programs, concise evaluation and presentation of project data; including reserves, target potential and economics. Ability to work with personnel of diverse disciplines and cultures and function effectively in a team environment.

KEY ACCOMPLISHMENTS

- * Completed detailed country assessments, including analyses of geological environments, mineral potential, tax structure, mining laws and socio-economic conditions for corporate decision making.
- * Developed the exploration concept and performed the initial reconnaissance that led to discovery of the McLaughlin Gold Mine, a 3 million ounce, 250,000 ounce per annum, open pit, gold mine.
- * Managed the McLaughlin Gold Project including geological studies, drilling, reserves, engineering, metallurgy, governmental and public relations, environmental studies and preliminary feasibility for transfer to operations. Managed in excess of sixty individuals with diverse disciplines and a total exploration and development budget of \$25 million over a three year period.
- * Active participation in organizing and implementing Homestake's successful exploration program that met objectives by increasing gold reserves over the past ten years.
- * Successfully negotiated a favorable farm-out agreement for a gold project in Indonesia.
- * Identified, evaluated and acquired gold project in Indonesia that was drill tested with positive results.

WORK HISTORY

Consulting Economic Geologist - Reno, Nevada

1990-Present

Providing consulting services to the International Minerals Industry in project and country evaluations, regional assessments and exploration program management from "grass roots" to advanced development projects.

Homestake International Minerals Ltd. - Reno, Nevada**Vice President and Director, Exploration**

1985-1990

Responsible for identifying and evaluating worldwide precious metal properties for acquisition/joint venture. Concentrated in Asia, Pacific Rim, Central and South America. Duties included selecting target countries and evaluation of precious metal properties.

Homestake Mining Company - Reno, Nevada**Manager, Resource Development**

1983-1985

Organized and implemented an exploration program to search for world class USA deposits, including precious and base metals and rare earth elements as part of Homestake's diversification plan. Classified world class deposits to determine model characteristics and favorable areas within the USA for exploration. Managed joint venture properties, negotiated farm-out agreements and evaluated precious metal properties for acquisition.

Manager, Deposit Development

1979-1983

Managed drilling projects throughout USA including deposit development stage for the McLaughlin Gold Mine. Responsible for: geological studies; land acquisition; ore reserves; engineering; metallurgy; environmental impact; public and governmental relations; preliminary feasibility and capital budgeting.

Regional District Manager

1977-1979

Supervised exploration for gold deposits in western USA and developed conceptual models to guide exploration, including the Mercury-Hot Spring-Gold model and applied it to initial reconnaissance that led to discovery of the McLaughlin Gold Mine.

Senior Exploration Geologist

1975-1977

Responsible for evaluation of precious metal occurrences in the Great Basin Province to generate precious metal projects.

The Anaconda Company - Butte, Mt, Yerington & Reno, NV

1965-1975

Held positions of: Geologist, District Geologist, Mine Geologist, and Special Projects Geologist. Conducted the Yerington District, Nevada exploration that led to discovery of major, low-grade copper deposit.

EDUCATION

University of Colorado, M.S. (Geology) - 1965

University of Colorado, B.A. (Geology) - 1963

AFFILIATIONS & PUBLICATIONS

Member - SEG and SME

Author of "Anatomy of a Discovery: the McLaughlin Gold Mine, Napa, Yolo and Lake Counties, California", published in Economic Geology Monograph 8, 1991.

How Homestake hit invisible gold

By Mike Johnson
Examiner Business Writer

A new era is dawning in gold exploration that may dramatically increase the amount of the precious metal mined in the United States.

The runup in gold prices is, for the first time in more than a hundred years, sending hopeful prospectors into remote regions. At the same time, discoveries in geological science are combining with advances in technology to increase the likelihood of finding the yellow metal.

"The mule and the gold pan are gone forever," says George Brimhall, a geologist at the University of California at Berkeley, who adds, "The gold search has gone from a prospector's art to a science... that opens up a whole new door on exploration."

A new picture of the earth's crust is emerging, and it is helping to show gold hunters where to look.

Experts such as Brimhall caution that it is too early to forecast how much gold might be found using the new techniques. But an example of the power of these methods came last week with Homestake Mining Co.'s announcement that it had discovered an estimated one million ounces of gold in Napa County with a current market value of about \$630 million. If actual mining holds to expectations, the find will increase total U.S. gold production, already led by Homestake, by about 10 percent when an extraction plant is built in 1984.

The find came barely three years after Homestake committed itself to an extensive exploration program covering the entire United States. And there may be more surprises — Homestake has said more gold might yet be discovered at its 31-square-mile Napa site, and in its annual report the company said it was evaluating "several promising targets" for gold.

Homestake has done studies to determine how much gold it can expect to uncover using its new techniques. And while the company declines to discuss the details of its research, vice president of exploration James Anderson says his company's hopes are mirrored in the money it is spending for exploration.

After years of muddling along with a budget of less than \$1 million, the San Francisco company pumped \$2.5 million into exploration in 1978, upped that to \$12 million last year and will spend about \$16 million this year. Says Anderson, "In our view the world (of gold exploration) changed forever about 1977." Homestake's discovery in Napa came from "concepts and techniques that had never been applied to gold exploration before," he adds.

Until as late as the 1930s, says Ken Jones, Homestake's manager of exploration in Reno, gold was sought by men who quite literally would walk around in the moun-

Page 11 Section C

Aug. 31, 1980 ★★★

S.F. Sunday Examiner & Chronicle



DATA

The most advanced geological research is combined with the aid of modern computers to form a model of what and where to look for gold.



PROSPECTING

Looking for the model in nature. Field geologists, using helicopters and off-road vehicles, take rock samples from area that fit the model.



ASSAY

Testing the model. Hundreds of samples from a prospective site are analyzed with radiation that determines the percentage of gold.



GOLD

Pure gold. Six tons of ore have released its one ounce of gold to the combined efforts of geologists, miners, business managers and the advancing knowledge of geology and computers.



REFINING

Refining. The rock is pulverized, the gold is dissolved with cyanide, and the gold is precipitated in a semi-pure form called flux. The final step in refining is smelting. Gold can be melted out of the flux because it will liquify with lower temperatures than the remaining impurities.



MINING

Mining. Millions of tons of rock is blasted and the rubble is hauled to a extraction plant.

Examiner graphics

tains looking for little flecks of yellow metal. The sourdoughs became so skilled that they could estimate the worth of a discovery by how many handfuls of dirt had to be washed around in a gold pan to produce a few flakes. Fire assaying, essentially melting the gold out of a sample with a low-temperature flame, helped. But it was slow and expensive.

Then, in the 30s "for the first time people realized that there was gold in some deposits that was so fine that it couldn't be seen with your eyes," says Jones. Essentially all the gold that had been found was from small veins, nuggets or flakes of nearly pure metal that could be detected by sight. But by using "atomic absorption," which "fingerprint" the elements in a sample by the way each reacts to radioactivity, a geologist now could start looking for "dispersed deposits." Those deposits, like Homestake's Napa discovery,

are large areas of rock several miles in volume that contain extremely fine gold particles distributed like cake flour in a sandbox.

But having assaying techniques for this "invisible" gold isn't much help unless you know where to look in the first place. Without some guide that points to Napa County rather than Monterey County, for instance, Homestake could have spent decades testing rock in the wrong location. It would be "like pulling the handle on a slot machine," Jones concedes.

Homestake is chary about revealing its exact methods. But they worked: The discovery area has been searched for better than 100 years by miners looking for mercury. Even though atomic absorption assaying has been available for more than a quarter of a century, the miners "just simply overlooked" the gold because they didn't

expect it to be there, explains Homestake president Harry Conger. "We went there because we liked the looks of the geology."

The heart of Homestake's exploration method seems to be an ability to combine raw geological data — such as the type of rock, its hardness, the quantities of various minerals — into a bigger picture of an area. This model in effect takes the scraps of information and predicts other qualities such as the extent and percentage of gold that might be present. The modeling technique still is only an educated guess, but it has been used successfully for years in the search for other minerals such as copper, notes geologist Brinwall.

The data are entered on punched cards that are "read" by a computer, which then compares the data with descriptions of where the mineral has been found in the past. Homestake's computerized modeling — a technique that has been used for years in oil exploration — is only just beginning. The company has been renting time on a time-shared computer, but has recently bought its own machine. Apart from being more convenient, it will also be easier to protect its information from being tapped.

The technique's potency is evidenced by the fact that the raw data fed into it on the Napa site all came from field research done years ago. "We didn't have any modern information that went into the model," says Jones. "We dusted off a few old filing cabinets for the data." Even though Homestake had the early evidence of gold in Napa, it had to be combined into the model before their geologists could "see" the potential.

Again, Homestake is mum on the exact geology of its find. But it is likely that the gold was deposited millions of years ago when lava-like magma rose into the earth's crust. If the magma hit "just exactly the right set of conditions," a dispersed gold deposit could be formed, explains Berkeley's Brimhall, who points out that even this explanation is only a theory.

But the magma could have brought gold with it to near the surface. Then, in an extremely slow boil that could have lasted millions of years, the gold may have been leached out by the acidic ground water that was heated up by the magma. When the magma retreated, the finely dispersed gold was left behind.

The theory is so new that it will be years before there is any notion of how many of these pockets of gold might exist, Brimhall says. Several have been found in Nevada, but Homestake's is the first certain discovery in California.

Still more uncertain is how much gold might be found from these dispersed deposits. Says Homestake's Jones: "It's like looking for an elephant in the bushes. We see a tail and a foot and a trunk, but we can't be sure if it's an elephant or two giraffes."

How Homestake Found \$1 Billion In Gold

Washington Post

KNOXVILLE, Calif. — On a rainy day in early 1978, Don Gustafson stopped in these barren foothills, favorite haunt of rattlesnakes and buzzards, and asked if he could look around Bill Wilder's little mercury mine.

Wilder, a big rumpled man with a protective love for the place, feigned reluctance, but eventually let the blond, earnest geologist talk him into a short tour. Wilder asked what Gustafson was looking for. "Minerals," Gustafson said.

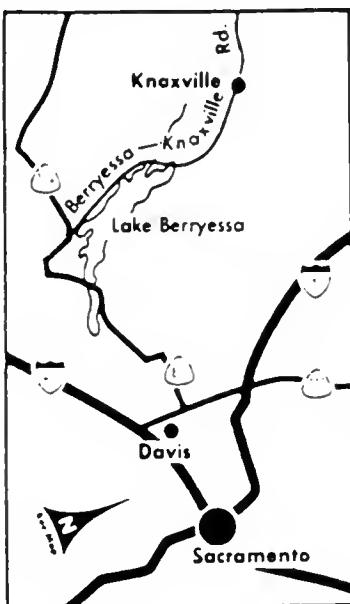
For the next two years, through negotiations of a lease and drilling of dozens of deep holes, Gustafson would say little more. It was not until the helicopters with the reporters from San Francisco began arriving the night of Aug. 27, 1980, that Wilder finally realized he was a millionaire. The taciturn Gustafson, working for the Homestake Mining Co., had made the greatest California gold discovery in half a century.

Gold has fired the imaginations of men out here for centuries, bringing more disappointment than joy to the Spaniards who came looking for El Dorado and the '49ers who panned the streams in the Sierra Nevada. But now, with the price of gold more than 10 times what it was a decade ago, a new gold rush has begun, and Gustafson and Wilder are its vanguard and its inspiration.

California officials now process 2,000 mining claims a month. Major mining companies are attempting to re-examine every mine in California and Nevada that ever produced any gold. An unusual number of unininvited geologists are showing up at motels near Clear Lake, the closest real community to this ghost town.

Peter Ertman, the state geologist for the California desert district far to the south, said the new rush for gold and other precious metals has affected everyone from the large major companies to the small guy from L.A. who wants to go out on a weekend and make his bonanza."

Yet these modern gold prospectors are searching for treasure almost as elusive as El Dorado, the Spaniards' fabled city of gold. The



gold to be found is microscopic, rarely visible to the naked eye.

"We've only seen four or five minute pieces of gold in all these holes," said Jerry Molinari, a young Homestake geologist who has spent two years helping drill holes as deep as 900 feet into the hills around Wilder's "One Shot Mining Co." 70 miles north of San Francisco.

Only mining giants like Homestake can afford the enormous cost of digging out a dumptruck full of rock and dirt to extract just one ounce of gold, but many of are yearning to do just that.

Freeport Minerals Co., Houston Oil and Minerals Corp., Cyprus Mines Corp., Occidental Petroleum Corp. and Newmont Mining Corp. are all starting gold projects in Nevada and California. Homestake's is still the biggest, promising to extract 3.2 million ounces of gold from 20 million tons of ore — forming a pit that will eventually measure one mile long, one-half mile wide and 500 feet deep.

Mining that \$1 billion worth of gold is not expected to begin until

1984. For now the work of pinpointing the gold's location beneath the grit and scrub brush proceeds in a careful, scientific way. A team of six young Homestake geologists, bearing degrees from places like the University of Colorado and the University of Utah, work from 7:30 a.m. to 4:30 p.m. each day out on the slopes or in a one-story makeshift office.

They carefully label the veins and metallic properties of 2.5-inch-diameter cores of rock which have been brought up from nearly 300 holes punched deep into the ground.

The samples are then trucked to a lab near Reno, Nev., where they are crushed, melted and chemically treated. A small bead of gold mixed with silver remains, is weighed and the results sent back to the team to guide their search.

It can be, as geologist George Lanier said, "boring." But the first discovery of the precious metal here in a place where no one had ever dug for it unfolded with mystery and intrigue.

Scientist that he was, Gustafson was pursuing an old dream with little more than a rock pick, persistence and common sense. "I was lucky," he said.

The 43-year-old geologist grew up in rural Illinois. His father had attended Sunday school with Ronald Reagan. Gustafson received his degree in geology from the University of Colorado, married his high-school sweetheart and worked on Anaconda Co. copper mines for several years.

Then he switched to Homestake and its exploration division and spent much of 1975, 1976 and 1977 looking at "every previously mined deposit in Nevada." Homestake, like other mining companies, hoped to find a residue that could be profitably mined now because the price of gold had gone so high and the technology of gold mining had so improved.

"Every once in a while I would come across a sequence of characteristics, essentially five characteristics, that suggested the presence of gold," he said. This was and is Gustafson's and Homestake's big secret. It led him to Wilder's mine. He declined to discuss it in detail while he and other Homestake geologists still scour the West, trying to find other areas where the formula might reveal hidden gold.

See GOLD, Page G6

Gold

Continued From Page G1

"In the summer of 1977, I was looking through the old Homestake files, some 100 years old, and came upon a prospecting report that had been done in 1925. I looked at the geology, the assay data. It had all the characteristics that I had been noticing, and what was unique was that no one had found gold there before," Gustafson said.

In September 1977, Gustafson went to look. It was another old mercury mine in an area not far from Wilder's property. (The presence of mercury is the only part of Gustafson's five-part formula that he will confirm.)

He took 40 samples, and they all had gold in them. With that find, he arranged a budget from his company to comb a surrounding area of about 1,500 square miles: "I had \$90,000, a blazer, a pair of field boots and a good idea."

That first find eventually proved too shallow to be profitably mined. The microscopic fragments had to extend down 200 or 300 feet before the company could make money. But Wilder's place looked promising.

Another Homestake geologist, Joe Strapko, spent three weeks taking 100 more samples and mapping the area's geological formations. The samples indicated "spectacular gold values right on the surface and over a large area," Gustafson said.

Homestake was ready to negotiate with Wilder for what turned out to be its first big gold bonanza since it opened its huge mine in Lead, S.D., in 1878.

But Wilder refused to sell. "The thought of giving up this property was to him like selling his child," Gustafson said. To this day, Wilder seems less interested in talking about the gold strike than in showing visitors how he turns the reddish rock-holding mercury ore into the slippery silver liquid.

Gustafson had to reach an agreement before he could bring in the drilling rigs that would decide if the gold went deep enough to mine. He could do nothing for the nine months the negotiations dragged on.

In the end, Homestake agreed to lease the land and pay Wilder an undisclosed royalty for whatever they found. Last fall, the company announced an estimated million ounces of gold had been confirmed on the site. Last month it tripled the estimate.

Asked if that made him a millionaire, Wilder said, "I guess so. I haven't seen much of that yet but it's a lead pipe cinch if it goes as they say, and if it doesn't, somebody is in trouble."

His friend Gustafson, for his discovery, received a promotion and a "sizable bonus," a Homestake spokesman said.

Homestake spokesman said,

"Wilder plans to travel a lot with his money. He has worked at the mine since 1960 and

bought it for \$100,000 in 1974 from the estate of the Knox family. One hundred years ago the Knox mercury mine supported a town of about 1,000. Knoxville, curiously, is still on all the maps, but the town is gone. Only a couple of old buildings remain on the road up to Wilder's mine."

Homestake won't revive the town. The company plans to bring in about 200 workers to run the

mine, but it expects most of them to live in a resort area 10 miles to the northwest.

Gustafson said the company plans to spend about \$1 million by 1984 in environmental protection for the area and will landscape and replant the pit for some eventual recreational purpose such as a Boy Scout camp.

By then, Gustafson plans to be long gone, searching for another big strike.

Anatomy of a Discovery: The McLaughlin Gold Mine, Napa, Yolo, and Lake Counties, California

DONALD L. GUSTAFSON

Consulting Economic Geologist, Reno, Nevada 89509

Abstract

The discovery of gold mineralization at the Manhattan mercury mine, Napa and Yolo counties, California, in 1978 was the result of applying a new exploration ore deposit model in a region previously unprospected for gold. This discovery, the McLaughlin gold mine, owned and operated by the Homestake Mining Company, is a classic mercury-bearing, epithermal hot springs gold deposit currently producing approximately 7,776,000 g (250,000 troy oz) of gold annually.

The exploration program that led to this discovery was based on a genetic model for such deposits. The model was developed using basic knowledge of ore-forming processes combined with careful field observations made during examination of many known precious metal districts in the western United States. Theoretically, hot spring systems could host gold deposits, and indeed, gold in these environments had been recognized for years. However, at the time of the McLaughlin discovery, it was not known to occur in sufficient quantities to inspire geologists to explore hot spring systems specifically for gold. Field observations recognized the presence of hot spring deposits and mercury mineralization associated with precious metal districts, as at Bodie, California, and this association prompted the development of a hypothetical model. Subsequent exploration activities were directed toward the examination of mercury mines and prospects as potential targets for gold deposits. The model envisioned hot spring deposits (sinter) containing mercury mineralization at the surface, with anomalous gold values grading downward into significant ore-grade gold values.

The initial examination of the Manhattan mercury mine recognized the features represented in the hypothetical model, and sampling detected anomalous to ore-grade gold mineralization at the surface. An aggressive exploration program resulted, with advancement of the project through Homestake's staged exploration program to full production. This program consisted of surface mapping and sampling followed by three-dimensional testing in the target exploration and deposit development stages of exploration. Exploration activities during the four and one-half year period prior to transfer of the deposit to Homestake's operations group included drilling of 409 holes, underground drilling and crosscutting, engineering studies, metallurgical test work, environmental base line studies, governmental and public relations programs, and economic analyses to produce a conceptual feasibility study justifying the project for transfer in June 1982 to the operations group for design, construction, and ultimately, production.

The steps that led to the McLaughlin discovery are outlined below, as are the results of the various phases of exploration.

Introduction

HOMESTAKE Mining Company produced the first bar of gold from the McLaughlin mine in March 1985, seven years after initiation of an exploration program designed to search for gold deposits related to known hot spring systems and mercury occurrences. By April 1990, the mine had produced one million ounces of gold. The purposes of this paper are to outline the logical steps which were responsible for this significant gold discovery in an area not previously prospected for gold, and to describe the staged exploration program undertaken by Homestake's exploration team, once gold was discovered, in order to define the orebody for transfer to the operations group for design, construction, and ultimately, production.

The McLaughlin mine is named after Donald McLaughlin, the late chairman of the Homestake Mining Company. The deposit contains approximately 93,300,000 g (3,000,000 troy oz) of gold, which will be mined by surface methods over the next 20 years. Daily ore production is currently 5,000 metric tons (5,500 tons) per day, and annual production is 7,776,000 g (250,000 troy oz) of gold.

Location and Access

The McLaughlin mine is located in the Knoxville mining district at the site of the old Manhattan mercury mine, 113 km (70 mi) north of San Francisco and 29 km (18 mi) southeast of Clear Lake, California (Fig. 1). The mine site is located on the border of

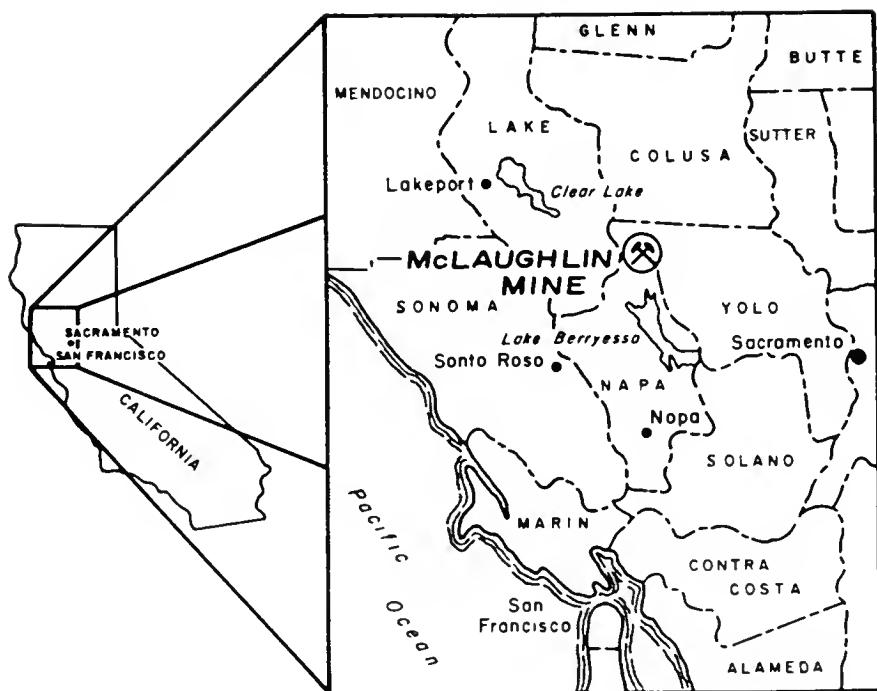


FIG. 1. Location of the McLaughlin mine.

Napa and Yolo counties, and the plant site is located 7.2 km (4.5 mi) distant in Lake County. The area is a remote, sparsely inhabited part of the Coast Ranges of California, midway between Clear Lake and Lake Berryessa, at an elevation of approximately 600 m (2,000 ft). Good access to the mine area is provided by paved roads.

History of the McLaughlin Mine Discovery

The highlights of the McLaughlin gold discovery can be identified as follows:

1. The gold discovery was made using a new geologic concept in an area previously not prospected for gold.
2. It was the first major gold discovery of the gold rush that began in 1978 to 1979, created by the rapid rise in the price of gold.
3. At the time of discovery, it was the third largest gold discovery in the United States since World War II, with in excess of 31,000,000 g (1,000,000 troy oz).
4. The deposit contributes significantly to the profitability of Homestake's operations.

The discovery of the gold deposit that produced these highlights was the result of a step-by-step exploration program designed to delineate a gold deposit exposed at the surface. The steps leading to the discovery are outlined below.

In the mid-1970s, Homestake was actively exploring, mainly in the western United States, for gold de-

posits that could be mined by surface methods. Exploration included examination of old precious metal districts to determine their potential for open-pit mining of ore left behind by previous miners. Homestake geologists were encouraged by management to generate new ideas, concepts, and models to use in their search for ore deposits.

The fact that gold occurs in geothermal hot spring environments is well documented in the literature. The Broadlands geothermal field in New Zealand and Steamboat Springs in Nevada are examples of these gold occurrences where gold is reported in limited quantities and is actually precipitating from geothermal waters today. Physical and chemical conditions in hot spring systems are right for the formation of gold deposits but were largely ignored by explorationists because economic concentrations were not known to exist in presently active systems. Studies had previously been conducted by Homestake to determine the validity of a hot springs gold model but were discouraging for this reason. Still, geothermal systems provide two important elements needed to form ore deposits: a plumbing system and hydrothermal solutions. Therefore, the hot springs-gold model was intriguing at this point from a theoretical standpoint, but at the time of the McLaughlin discovery was only a concept.

The basic field observations made during the examination of numerous precious metal districts in the western United States advanced a working hot

springs-gold genetic model supported by physical and chemical considerations. The occurrence of occasional active or fossil hot spring deposits, in the form of predominately siliceous sinter deposits, plus mercury mineralization in the form of cinnabar, was observed in close association with several known precious metal districts. Mercury had been used as a geochemical pathfinder for years by explorationists in their search for gold deposits, but geologists did not consider mercury mines as a potential location to look for gold deposits. Other common mineral associations recognized in known gold camps were sulfur and antimony mineralization.

These observations were instrumental in development of the genetic model for mercury-bearing hot springs gold deposits and triggered the thought process of relating actual field observations to theoretical considerations. Since hot spring deposits and mercury mineralization occur near existing gold mines, why not consider searching for gold deposits near known hot springs and mercury mines? Metal zoning in mineral deposits is a well-documented feature, and it was envisioned at this point that low-temperature minerals such as mercury would form high in the hydrothermal system, and if gold were present in the hydrothermal fluids, it should precipitate at a higher temperature and therefore lower elevation below the mercury mineralization. Examples of gold districts examined in the study by Homestake that contain hot spring deposits and mercury mineralization in association with gold mineralization are Bodie, California, Borrealis, Nevada, and Goldfields, Nevada.

As part of Homestake's exploration activities in the mid-1970s, a review of the numerous prospect examination reports in its exploration files was under-

taken to determine if any prospects examined over the past 75 or more years justified reexamination. This activity was not a prerequisite for concept development, but in this case had important implications for the McLaughlin discovery. A review of these files in mid-1977 identified one area, first examined by Homestake geologists in 1926, as significant and justified a follow-up field examination. This project area, Cherry Hill, near Wilbur Springs, Colusa County, California, was described by Homestake geologists as containing hot spring deposits, mercury mineralization, and gold mineralization. Both mercury and gold had been mined from this area on a limited scale in the late 1800s and early 1900s.

Field examination of the Cherry Hill area confirmed the previous observations. The area contains active hot springs, hot spring sinter deposits, and widespread mercury and gold mineralization in altered Knoxville sedimentary rocks of Jurassic age.

This property examination produced the essential working model for the previously theoretical mercury-hot springs-gold concept and confirmed the earlier theoretical considerations and field observations. Additionally, it provided an area containing economic gold values in association with mercury and hot spring deposits. The hypothetical model now became a working exploration model. The Cherry Hill occurrence also directed Homestake's attention to the mercury districts of the California Coast Ranges, which were not known for gold production and therefore were long ignored by precious metal explorationists.

A land position was secured at the Cherry Hill target, and detailed mapping and sampling were conducted to determine the extent of surface gold min-

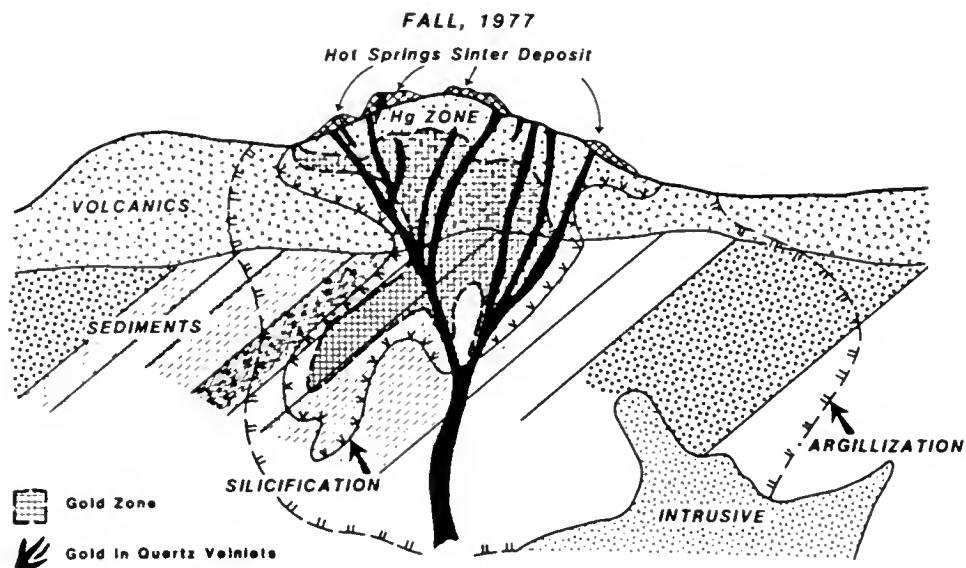


FIG. 2. Hypothetical mercury-hot springs-gold model.

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eralization and the location of drill holes for three-dimensional testing. The Cherry Hill target was later drill tested in 1979 and a small, currently uneconomic, open-pit inventory delineated. The Cherry Hill project served an important role in Homestake's successful gold exploration program by providing an area to study and refine the genetic target model.

Mercury-Hot Springs-Gold Exploration Model

A mercury-hot springs-gold exploration model was developed and presented to Homestake management at the fall, 1977, budget meeting. The model as presented (Fig. 2) consisted of a geothermal system, structurally controlled, containing hot spring sinter deposits with cinnabar (mercury) mineralization at the surface, containing anomalous to significant gold values and changing downward to significant and profitably mineable gold values within a permeable host rock. Arsenic and antimony values were envisioned as additional significant geochemical indicators of potential gold mineralization at depth. The presence of a permeable host rock is important to provide dissemination of gold mineralization over a sufficiently large area for surface mining, rather than confining mineralization within a vein system that would dictate an underground mining situation.

With the working exploration model developed, and Cherry Hill presented as an example, a reconnaissance budget was requested to pursue the concept. Homestake management viewed the concept and reconnaissance program with enthusiasm and provided sufficient funds to conduct a reconnaissance program.

Mercury-Hot Springs-Gold Reconnaissance Program

The first question to answer was where to apply the concept to achieve success and accomplish Homestake's corporate goal of discovering a plus-31,000,000-g (1,000,000-troy-oz) gold deposit. On a global scale, the Pacific Rim with its active geothermal areas and metal provinces zoned around the Pacific was considered potential prospecting territory. It was decided to concentrate the initial reconnaissance program in the Coast Ranges of California near the working model, the Cherry Hill project. The program was eventually expanded to include the western United States.

The mercury-hot springs-gold reconnaissance program initially involved an extensive literature review of all published mercury-hot springs occurrences. Due to the location of Cherry Hill, the Clear Lake area received top priority, and reconnaissance began in this area. Eighty-eight mercury-hot springs areas were selected for examination in the field and prioritized from the literature search (Fig. 3).

An initial examination, consisting of mapping and

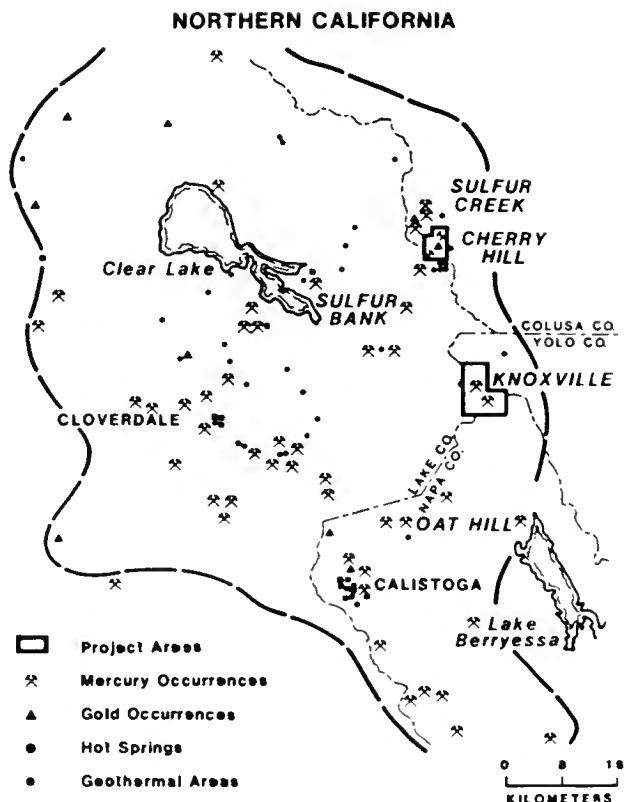


FIG. 3. Clear Lake gold reconnaissance.

sampling, was performed in each area to determine its geologic characteristics and geochemical signature, particularly the presence or absence of gold values. The examination approach was to sample as deeply in the mineralized system as topography would allow—that is, in drainages cutting the system, since gold was envisioned to be deposited at lower elevations, in the higher temperature environments. Number ten on the list to examine was the Manhattan mercury mine, located in the Knoxville mining district near the intersection of Napa, Yolo, and Lake counties, California.

Initial Examination of the Manhattan Mine

The Manhattan mine, 22 km (13 mi) south of the Cherry Hill project area, was examined on February 16 and 17, 1978, after permission was granted by the owners. The two-day examination consisted of generalized geologic mapping and sampling over a 2-mi² area. The extensive alteration and quartz veining observed were impressive. Unlike the majority of the mercury mines in the Clear Lake region, Manhattan is characterized by Tertiary andesites and basalts, overlying sedimentary rocks of the Knoxville Formation and Franciscan metasedimentary rocks and serpentinites. The contact between the Knoxville

FEBRUARY 16, 17, 1978

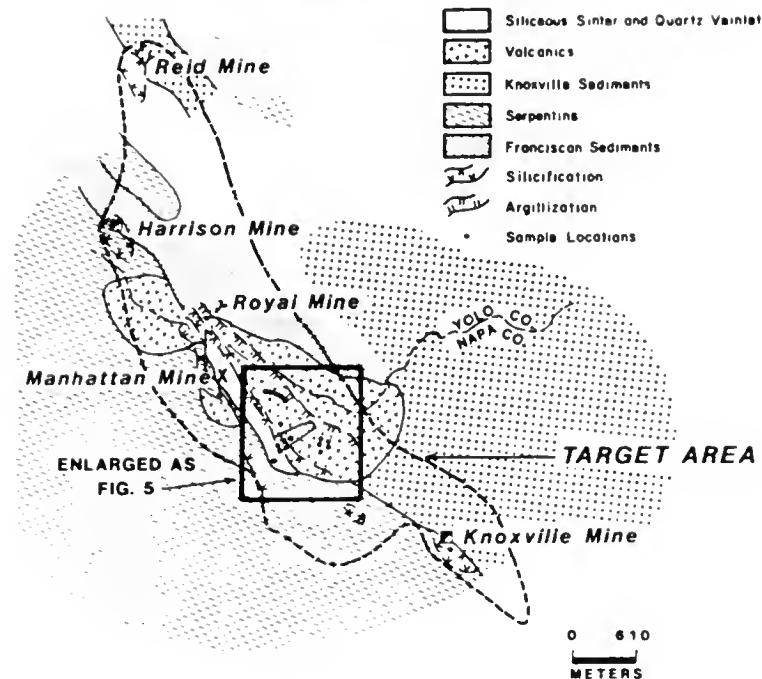


FIG. 4. Results of initial examination.

Formation and the Franciscan Formation is defined by a major north-south subduction zone that may have provided the channelway for hot spring solutions re-

sponsible for the mercury mineralization. Widespread alteration, predominately argillization and silicification, plus stockwork quartz veining and siliceous hot

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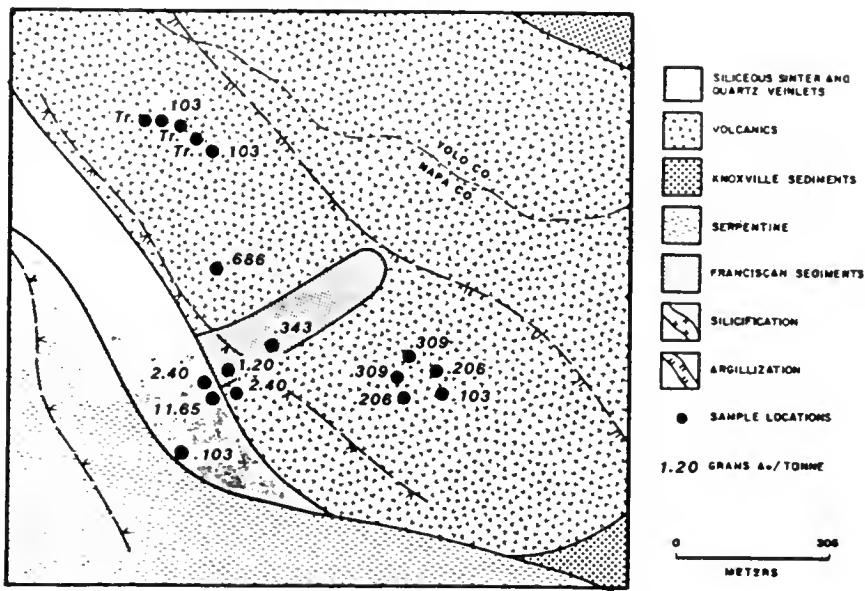


FIG. 5. Initial sample results.

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spring sinter deposits containing cinnabar, was recognized. This area had all the criteria of the mercury-hot springs model, plus potential for large tonnage if any gold values were detected.

The initial thought was, this area could be an open-pit gold mine if the important ingredient gold is present, and any anomalous gold values found in the samples will justify additional work. The 32 initial samples did prove the presence of gold to levels as high as 11.66 g Au/metric ton (0.34 oz Au/ton). Figure 4 shows the results of the initial mapping and sampling program. Figure 5 is a detailed map showing the initial sample results, with gold values in grams per metric ton.

Examination of this prospect and the assay results proved the concept, and a project was born. Optimism was high that the Manhattan area had potential to become Homestake's first open-pit gold mine.

A preliminary evaluation followed, to determine geology, extent of alteration, and surface gold mineralization. The results of this work, which were extremely encouraging, are shown in Figure 6. Economic gold values were confirmed over an area 1,825 m (6,000 ft) by 152 m (500 ft). Forty-nine surface samples in this area averaged 3.79 g Au/metric ton (0.11 oz Au/ton). Three samples assayed more than 34 g Au/metric ton (1 oz Au/ton).

Land negotiations were entered into with property owners, and agreements were signed in October 1978. A detailed evaluation was started in November 1978, consisting of detailed geologic mapping, surface sampling (407 samples), a preliminary environmental

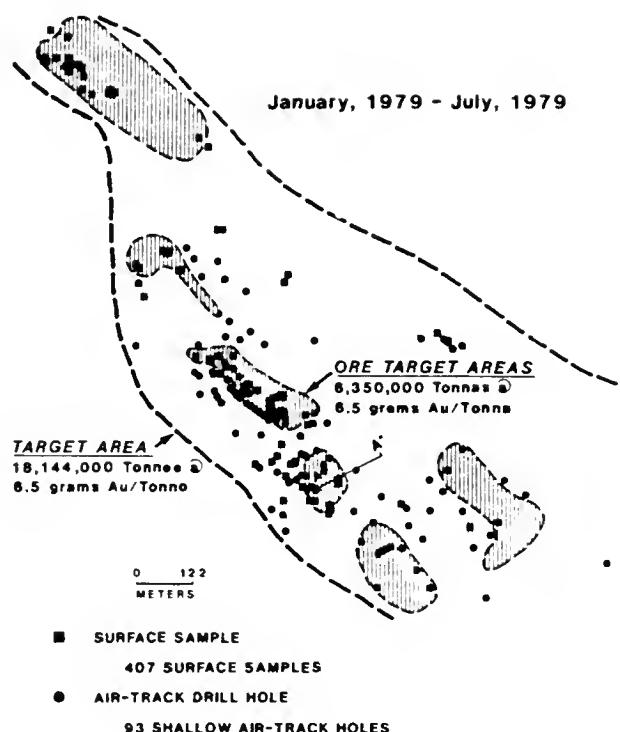


FIG. 7 Detailed evaluation stage

assessment, and metallurgical testing and drilling of 93 shallow (average depth 10.7 m [35 ft]) air-track holes to determine if gold values extended below the surface. The results of both surface sampling and air-track holes were very encouraging (Figs. 7 and 8) and resulted in a budget request to fund diamond drilling. A target potential of 18,000,000 metric tons (20,000,000 tons) at 6.5 g Au/metric ton (0.19 oz Au/ton) was envisioned at this time. The project budget was approved in June 1979, and the project was transferred to the target exploration stage.

Target Exploration Stage

The target exploration stage of exploration, as defined by Homestake in 1979, was divided into two substages: target evaluation substage and ore target evaluation substage.

The target evaluation substage was the initial three-dimensional testing of a specific target area. If preliminary results and economic estimates were favorable, the project was transferred to the ore target evaluation substage, consisting of additional three-dimensional testing plus preliminary engineering studies, metallurgical test work, further economic evaluations, and environmental appraisals.

Target evaluation substage

Before drilling on the McLaughlin target began, discussions were undertaken with the Napa County

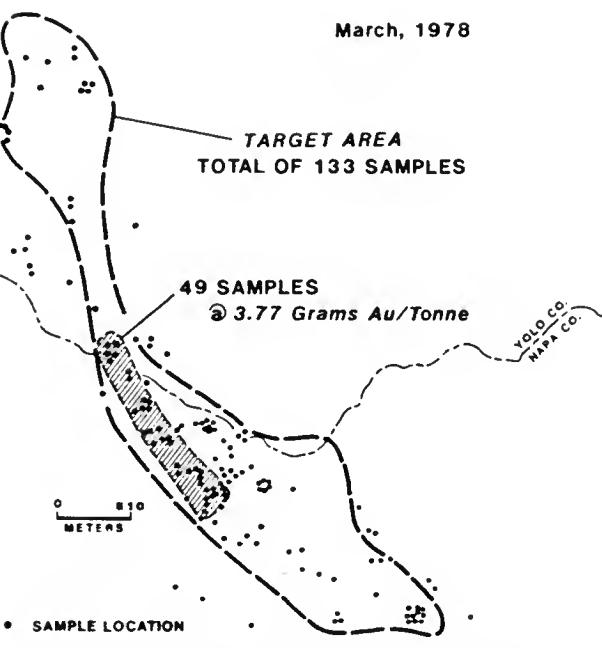


FIG. 6. Preliminary evaluation-stage surface sampling.

April, 1979

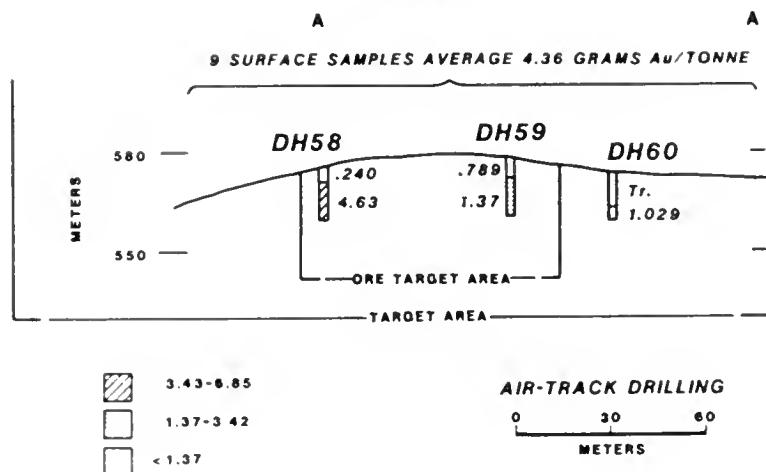


FIG. 8. Air-track drilling results.

Planning Department to inform personnel of the planned drilling activities and associated environmental impact. Due to extensive past mining disturbances, such as roads, open cuts, and underground workings created by mercury mining, county officials determined that the limited drilling activity would have minimal environmental impact.

The initial budget request was written for 12 diamond drill core holes to test the 18,000,000-metric ton (20,000,000-ton) target potential suggested by surface work. Diamond core drilling started on September 5, 1979, and drill hole 1 was drilled to a depth of 151.5 m (497 ft). Significant gold mineralization was intersected from the surface to a depth of 121.6 m (399 ft) and averaged 6.17 g Au/metric ton (0.18 oz Au/ton) (Fig. 9). The results of the first hole confirmed economic gold mineralization at depth. Diamond drill hole 1 is considered to be the discovery hole for the project. Diamond drill hole 2, 53.3 m (175 ft) south of drill hole 1, was even more encouraging, intersecting 98.2 m (322.2 ft) that averaged 9.19 g Au/metric ton (0.268 oz Au/ton) (Fig. 10).

Core drilling continued, and test work was implemented to determine metallurgical characteristics of the ore. Composite samples of different rock types, alteration styles, and grade ranges were tested from each drill hole to determine metallurgical variations throughout the deposit.

With encouraging results from the initial core drilling, rotary drilling was undertaken in fringe areas of the deposit to expand the target size and define areas for additional, more expensive core holes. A total of 15 core holes and 29 rotary reverse-circulation holes were completed during the fall of 1979. The greatest concentration of core drilling was in the central por-

tion of the deposit, and by early 1980 enough positive information had been generated to calculate a minable inventory, in what is now called the Central zone, of 5,450,000 metric tons (6,000,000 tons) averaging 4.80 g Au/metric ton (0.14 oz Au/ton) (Fig. 11). During the target-evaluation substage, discussions continued with Napa County planners and were implemented with Yolo County planners to inform them of Homestake's activities and continued interest in the property. Legal advice was obtained from local law-

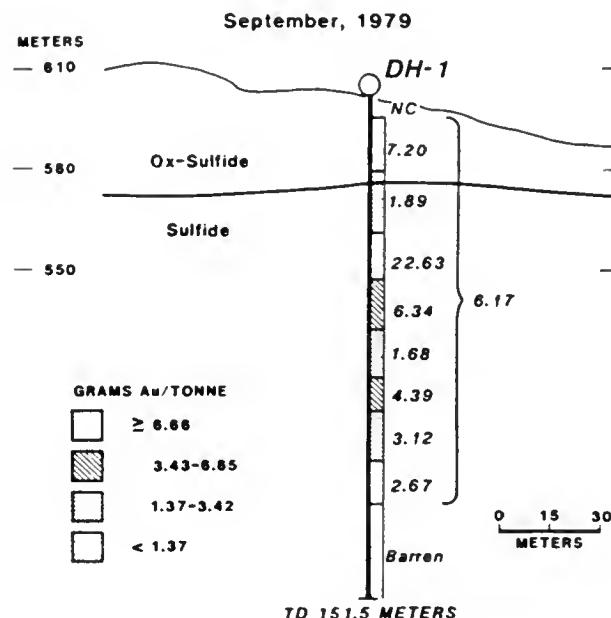


FIG. 9. Gold values in drill hole 1.

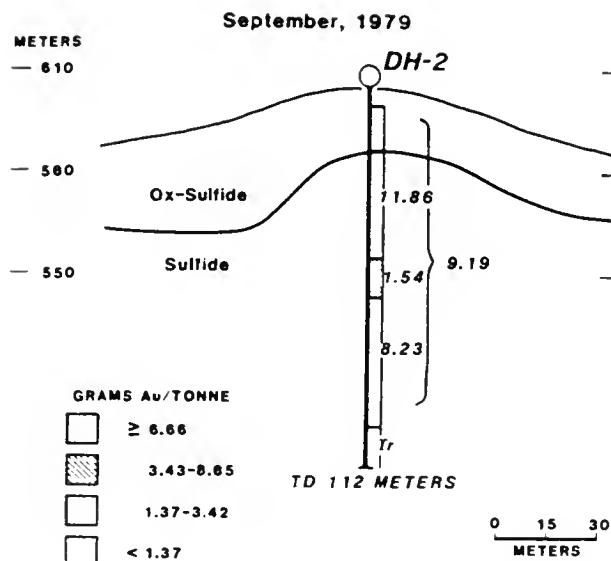


FIG. 10. Gold values in drill hole 2.

years to determine permit requirements. Governmental relations became a very important aspect of the project. A preliminary environmental assessment was completed to identify any potentially fatal flaws.

The project was transferred to the ore target evaluation substage in March 1980, following a complete data review and presentation of project data to corporate management. Target potential was still high,

and a total of 18,000,000 metric tons (20,000,000 tons) was still possible, as indicated by drilling outside the Central zone. Core drilling only was recommended at this point to continue the evaluation of the orebody, to insure sample quality, and to provide core for geologic studies. A sample preparation procedure was defined by Homestake's metallurgical group, and an in-house sample preparation laboratory was established. This was done to ensure quality control in sample preparation and analysis and to provide for more rapid turnaround of assay results. Studies indicated that reproducibility of McLaughlin samples was best achieved by crushing core samples to minus-10 mesh before splitting the sample for pulp preparation. One-assay-ton of fire assays were performed.

Ore target evaluation substage

Drilling resumed in March 1980, to confirm and prove up the 5,450,000 metric tons (6,000,000 tons) identified in the Central zone and hopefully expand the deposit to the north and south. This dual-phase drilling program involved three to four core rigs, reopening of old underground mercury workings, and continued metallurgical test work. Seventy-six additional diamond drill core holes were completed between March and September 1980, for a total of 120 diamond drill holes, and a minable inventory of 6,622,000 metric tons (7,300,000 tons) averaging 5.83 g Au/metric ton (0.17 oz Au/ton) was defined. The preliminary economic evaluation of the project was favorable, and there was sufficient confidence in

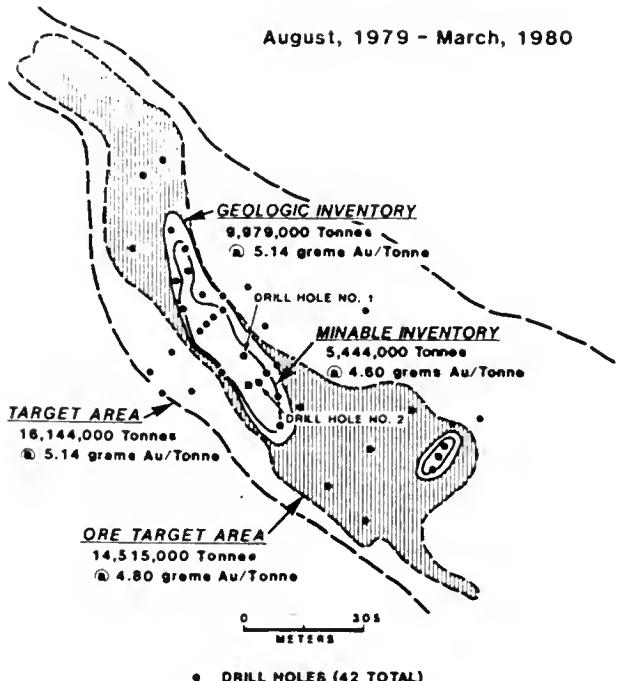


FIG. 11. Target evaluation-substage results.

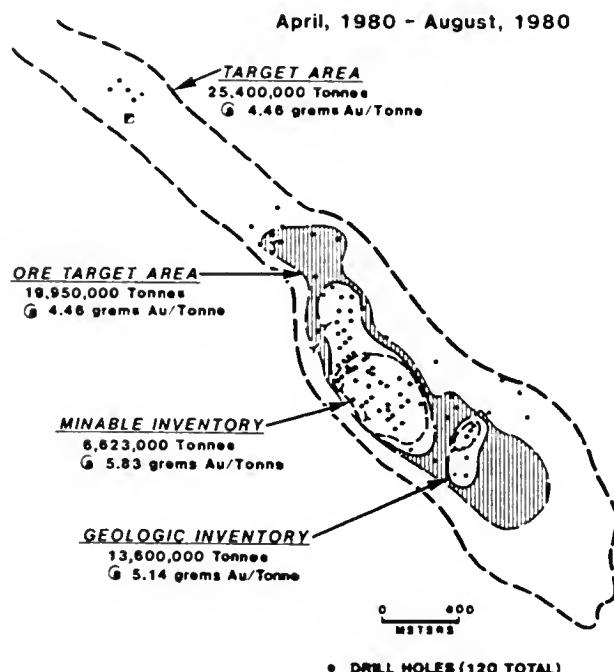


FIG. 12. Ore target evaluation-substage results.

the inventory for a public announcement on August 28, 1980. Target potential was estimated at this time to be 25,400,000 metric tons (28,000,000 tons) averaging 4.46 g Au/metric ton (0.13 oz Au/ton), using a cutoff of 1.37 g Au/metric ton (0.04 oz Au/ton). Results of this substage are shown in Figure 12.

Metallurgical testwork continued on all ore-grade intercepts to determine the optimum recovery process. Environmental base line studies were implemented and the governmental and public relations program was increased to keep agencies and the public informed of project activities. Numerous presentations were given to interested groups to outline Homestake's future plans for the project.

The Homestake board of directors held its annual field meeting on the project site in September 1980, and at this meeting the project was dedicated to Donald McLaughlin and named the McLaughlin gold project.

With the completion of 120 drill holes, favorable economic studies, and selection of a viable metallurgical process, the project was transferred to the deposit development stage of exploration; it was Homestake's first open-pit gold mine to attain this stage.

Deposit Development Stage

The decision to advance the McLaughlin project to the deposit development stage precipitated an aggressive program to define aspects of the deposit required by the operations group for its detailed engi-

TABLE I. Mineral Inventory

	Metric tons (tons)	G Au/metric ton (oz Au/ton)	G Au/metric ton (oz Au/ton) cutoff
Ore reserve	18,143,600 (20,000,000)	5.49 (.16)	2.06 (.06)
Geologic mineable inventory	23,838,000 (26,277,000)	4.80 (.14)	1.37 (.04)
Geologic inventory	35,574,000 (39,214,000)	4.11 (.12)	1.37 (.04)

neering and design studies, construction, and eventual operation. Figure 13 presents the results of this stage. Activities conducted during this period are summarized below:

1. Confirmation drilling: A total of 409 drill holes were completed by the exploration group to prove continuity of gold mineralization and provide data for ore reserve and mineral inventory calculation.
2. Underground drifting and crosscutting were completed to provide bulk samples of ore types for metallurgical testing and additional confirmation of ore-grade continuity.
3. Ore reserve and mineral inventory calculations were completed at various cutoff grades to provide necessary information for economic analyses.
4. Engineering studies were completed to provide pit designs, stripping ratios, location of facilities, and capital and operating costs.
5. Environmental base line studies were aggressively continued to provide the necessary data required for numerous permit applications.
6. The governmental and public affairs programs were continued to provide input to various governmental agencies and the public sector.
7. Metallurgical testing was used during this period to select the best process and plant size to recover gold from the complex ores. Numerous options were studied, based on cost, recovery, and environmental sensitivity.
8. The mineral inventory was calculated and is given in Table 1.
9. Economic analyses were completed using various parameters, i.e., plant size, recoveries, gold price, and capital costs.
10. A conceptual feasibility study for transfer to operations in June 1982 was completed for presentation to Homestake's board of directors.

To accomplish these diverse activities, a management task force was assembled, consisting of Homestake personnel and consultants representing each activity. It included individuals from the following

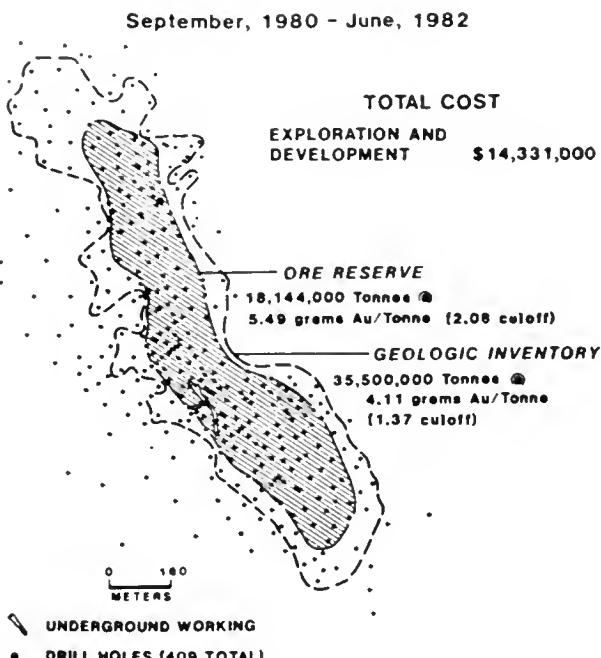


FIG. 13. Deposit development-stage results.

departments; geology, engineering, metallurgy, environment, legal, government, and public affairs and finance. A monthly task force meeting was held to ensure communication between groups. A cooperative effort between exploration and operations personnel was established to provide for a smooth transition to the operations staff.

In the four and one-half years following development of the mercury-hot springs-gold concept and application of this ore deposit model to exploration for gold deposits, the McLaughlin deposit had been discovered and advanced through Homestake's exploration and development stages. Total exploration and development costs were \$14,300,000, plus additional land acquisition costs. Transfer to the oper-

ations group occurred in June 1982, and the first bar of gold was produced from this classic mercury-hot springs-gold deposit in March 1985.

Acknowledgments

I would like to thank the Homestake Mining Company for permission to publish this paper describing the McLaughlin discovery and the activities that followed. My special thanks to the many individuals who devoted their expertise and enthusiasm and many man-hours to the success of the McLaughlin project. The list is too long to give individual recognition, but the support and dedication of all involved made the McLaughlin experience a memorable one.

APPENDIX C

JAMES H. HICKEY

JAMES H. HICKEYCURRICULUM VITAEEMPLOYMENT

Planning Director	City of Oak Park, Michigan 1952 - 1955
Chief Planner	Clark County - Springfield Regional Planning Commission, Springfield, Ohio 1955 - 1956
Planning Director	City of Southfield, Michigan 1956 - 1957
Chief Administrative Planner	Tri County Regional Planning Commission, Akron, Ohio 1957 - 1958
Planning Director	Stark County Regional Planning Commission, Canton, Ohio 1958 - 1964
Study Director	Stark County Area Transportation Study Canton, Ohio 1963 - 1964
Regional Planning Director	Association of Bay Area Governments Berkeley, California 1964 - 1970
Director	Napa County Conservation, Development & Planning Department Napa, California 1970 - 1989
Executive Officer	Napa County Local Agency Formation Commission, Napa, California 1970 - 1986
Zoning Administrator	Napa County Conservation, Development & Planning Department Napa, California 1970 - 1989
Interim Administrator	Geothermal Resources Impact Projection Study (GRIPS) for Napa, Sonoma, Mendocino & Lake Counties 1978
Coordinator	Tri County Environmental Data Committee Homestake-McLaughlin Gold Mine Project for Napa, Lake, and Yolo Counties 1981 - 1982
Executive Director	Napa County Office of Special Projects Napa, California 1989 - 1990
Planning Consultant	James H. Hickey & Associates Napa, California 1990 -



NAPA COUNTY

CONSERVATION — DEVELOPMENT AND PLANNING DEPARTMENT

JAMES H. HICKEY
Director

1195 THIRD STREET, ROOM 210 • NAPA, CALIFORNIA 94559
AREA CODE 707/253-4416

MEMORANDUM:

TO: James H. Hickey, Director

FROM: James O'Loughlin, Senior Planner *James O'Loughlin*

SUBJECT: Homestake Mining Company McLaughlin Gold Project

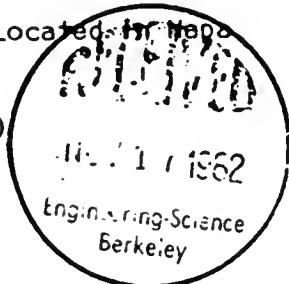
DATE: October 8, 1982

The following information is presented in lieu of the County Initial Study form. The contents of this memorandum conform to the requirements of State EIR Guidelines Section 15080.

PROJECT DESCRIPTION:

The project proposes mining and milling of large volumes of low grade ore from a mineral deposit at the site of the old Manhattan/One Shot Mercury Mine. The proposed operation will directly use 1,717 acres which Homestake Mining Company controls through ownership, lease, mining or mill site claims. Project components include:

1. Open Pit Mining Area (201 acres) (Located approximately 38°50'N, 122°22'W) Pit located approximately 20% in Yolo County and 80% in Napa County.
 - Roughly oval in shape with approximate dimensions of:
 - 5,300 feet long
 - 1,800 feet wide
 - 750 feet maximum depth
 - Approximate total volume (in tons) is 120-140 million.
 - Approximate total ore (in tons) is 20 million.
11. Mine Facilities and Low Grade Ore Storage (244 acres) Located in Napa County.
 - Ore crushing plant and service facilities (145 acres)



1,000' west of the pit
sized for 4,000 tons per day

- Low grade ore storage (99 acres).

3,000' northwest of the pit
sized for up to 12.5 million tons

III. Ore Processing/Extraction (80 acres) in Lake County. Located approximately 6 miles northwest of the pit.

- Pretreatment.
- Extraction using cyanide to form soluble gold cyanides.
- Sized for 4,000 tons per day.

IV. Roadway/Energy Transmission Corridors in Lake, Napa and Yolo Counties.

- Improve Morgan Valley Road from Lower Lake (Lake County) to mine site in Napa County for year-round traffic safety with realignment as required in project area to avoid mine facilities
- Relocate Rayhouse Road in Yolo County from valley floor to contour line above water impoundment level on perimeter of proposed reservoir.
- Relocate Knoxville/Berryessa Road in Napa County to avoid low grade ore stockpiles.
- Locate energy transmission corridors for electric power to adjoin existing and relocated roadways.

V. Tailings Disposal Facility (562 acres) in Lake County.

- Site approximately 3,000' west of proposed mill.
- Approximate volume of 20 million tons or the same as the amount of ore processed.

VI. Water Supply Reservoir (253 acres) in Yolo County.

- Dam located approximately 1.5 miles north of the pit.
- Dam on Davis Creek will contain 8,000 acre-feet of water storage in a reservoir draining approximately 10 square miles of headwaters area.

VII. Wasterock Disposal (342 acres) in Napa County.

- Area located 6,000' south of mine pit on U.S. Bureau of Land Management public lands.

- Sized for approximately 100-200 million tons.

VIII. Interconnecting Corridors.

- Numbering four consisting of:

1. pipelines for water from water reservoir to mine and mill
2. slurry line from mill to ore processing site
3. slurry pipeline from mill to tailings disposal
4. reclaimed waterline from tailings disposal to mill

ENVIRONMENTAL SETTING:

The location of the project study area is approximately equidistant between Lake Berryessa and Clear Lake in the North Coast Range of California. The area is approximately 16 miles southeast of Lower Lake, California, along the Morgan Valley (Lake County)/Knoxville Berryessa Road (Napa County) near the Napa, Yolo and Lake County Boundaries. The area is depicted on the Knoxville, Jericho Valley and Wilson Valley Topographic Quadrangles, 7.5 Minute Series, USGS Sections 1, 2, 11-14 T 11 N, R 5 W and Sections 19-36 T 12 N, R 5 W. The study area extends approximately 2-3 miles south, 3-4 miles north and 6-8 miles northwest from the abandoned site of Knoxville. The Knoxville mining district has experienced intermittent mining over the past 100 years through operations conducted at the Manhattan Mine, Royal Mine, Harrison Mine and Reid Mine. Archaeological resources exist within the project area. The overall topography is relatively rugged. The north-west trending ridges are dissected by a series of seasonal drainages on both the western and eastern facing slopes. Elevations range from about 1,300 feet to about 2,500 feet. Small terraces occasionally occur on the southwestern slopes; knolls and hilltops usually contain relatively flat areas. Morgan Valley (Lake County) is located within the project area. Numerous landslides exist within the project area. Geologic formations are largely metamorphic with shales being abundant and traces of schist and cryptocry stalline. Rock outcroppings are serpentine Class III, IV, V, VI and VII. Soils in the project area consist of Bressa, Contra Costa, Diablo, Hambright, Henneke, Maymen and Montara series ranging from clay loam, gravelly loam to rock outcroppings. Slopes range from 5% - 75%. Runoff is medium to very rapid. The erosion hazard is slight to very high. The ridgeline forms the divide between the Putah Creek/Lake Berryessa and the Cache Creek drainage basins. The Yolo County section of the project area drains into Davis Creek, which trends northward to Cache Creek. Runoff from Napa County enters either Hunting or Knoxville Creeks. Hunting Creek joins Putah Creek which in turn enters Lake Berryessa. Knoxville Creek Discharges into Lake Berryessa via Eticuera Creek. Three major plant communities occur within the area: chaparral, oak woodland and mixed oak-grassland. Much of the hillsides and hilltop terrain is covered with chaparral, while valley bottoms are covered with oak woodland. Minor riparian development occurs in the vicinity of springs and major drainages. A mixed oak-grassland occurs on many hillside slopes. The possibility of sensitive plants exists due to the serpentine outcroppings. Serpentine effects vegetation dramatically by allowing only marginal development or specialized plant communities.

No aquatic or wildlife species on the rare, threatened or endangered list or critical habitats exist within the project area. Access is via Morgan Valley Road (Lake County) or Knoxville/Berryessa Road (Napa County). The entire area lies within the high fire risk zone. Current land use includes agriculture (range), watershed, wildlife habitat, recreation and mining exploration.

POTENTIAL ENVIRONMENTAL EFFECTS:

The following agencies attended a scoping and consultation meeting, where comments were requested, on September 23, 1982: U.S. Bureaus of Reclamation and Land Management, U.S. Soil Conservation Service (Napa, Lake and Yolo County offices), California Departments of Conservation, Water Resources Control Board and Mines and Geology Division, Lake County Assessor's, Air Pollution Control, Agricultural Commissioner's, Planning and Building Departments, Napa County Planning and Public Works Departments and Environmental Health and Building Divisions and Yolo County Board of Supervisors and Planning Department.

Project effects are grouped into the following categories of potential environmental effects: traffic, archaeological, historical and paleontological resources, geology, soils, over burden geochemistry, water quality and hydrology (surface and ground), water supply and water rights, air quality and meteorology, wildlife, aquatic ecology, vegetation, noise, visual resources, socio-economics and land use, light, fire seismology, reclamation plan and energy.

MITIGATION MEASURES:

The EIR is proposed to formulate and discuss the potential significant effects and feasible mitigation measures for each.

ZONING AND GENERAL PLAN:

Napa County:

The proposed facilities are located in an AW (Agricultural Watershed) zoning district within an area indicated by the Land Use Element of the General Plan as Agricultural Watershed and Open Space. The commercial extraction of natural material is permitted in any district through the granting of a Use Permit pursuant to Section 12701 (b) (3) of the Napa County Code of Ordinances and an Exploration and Surface Mining Permit and Reclamation Plan pursuant to Ordinance No. 693.

Lake County:

The proposed facilities, located on private lands in Lake County, are designated rural lands by the General Plan with Agricultural District (AG-B3) zoning with a Scenic Corridor overlay zoning along the Morgan

Page 5
Homestake Mining Co. McLaughlin Gold Project
October 8, 1982

Valley Road. The project requires approval of a use permit, a plan development rezone and a reclamation plan in accordance with the General Plan provisions and Chapters 21 and 24 of the Lake County Code.

Yolo County:

The Yolo County General Plan designates the area as Watershed. The proposed reservoir and mining activity would be consistent with the General Plan designation, but amendments to the Yolo County Code for zoning, mining and reclamation plans will be required.

Bureau of Land Management:

The proposed facilities, located on public lands managed by the Bureau of Land Management-Ukiah District, are the subject of an Environmental Impact Statement. An official "Notice of Intent" was published in the Federal Register on September 29, 1982 to initiate the Federal permitting process.

ENVIRONMENTAL DATA ADVISORY COMMITTEE

(EDAC)

McLAUGHLIN PROJECT
LAKE, NAPA, YOLO COUNTIES
BLM-UKIAH DISTRICT

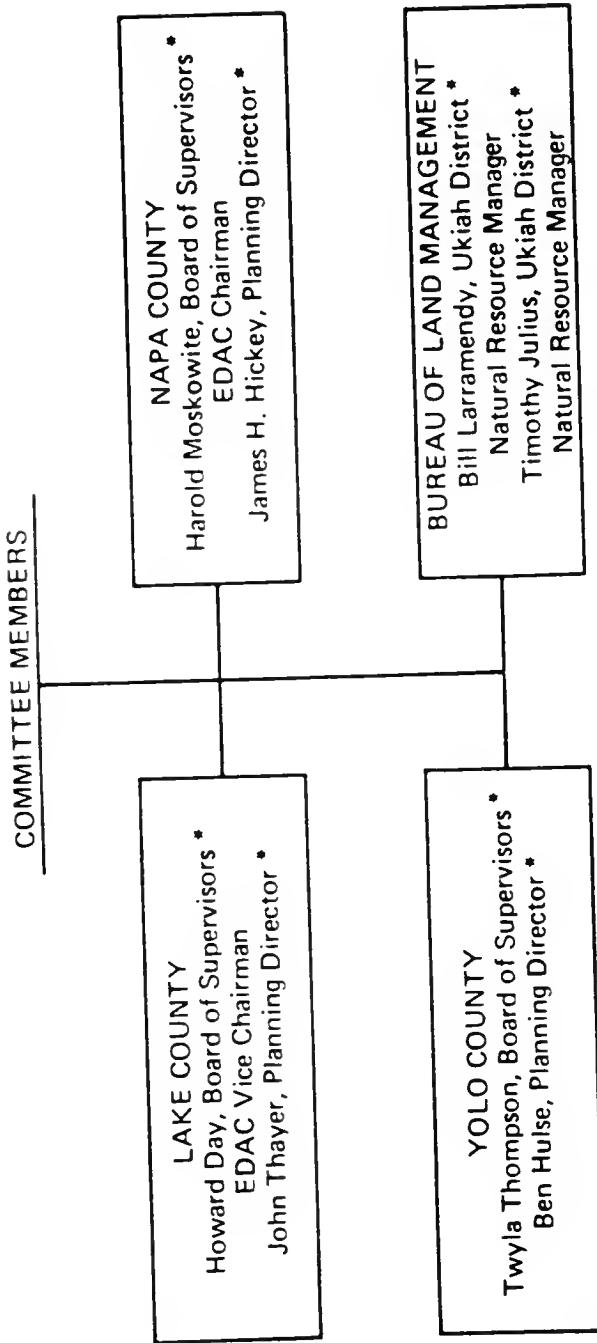


FIGURE: 1 A

* Worked on Homestake Project

APPENDIX D

IRENE JAGO

(Please see footnotes,
attached.)

JOHN JAGO

Mr. Jago thinks that the phrase "research and development" doesn't describe his recent public life very well; that while that category fits his natural inclinations and training, his actual contributions to the community have been largely "public service", having to do principally with water - more specifically, with the welfare of Clear Lake in his native Lake County. Yes, he admits, his activities in this field have been determined by his technical interests and experience, but he says that some of his more interesting developments have been for use at Jago's Resort, or, more recently, for the Jago Bay Subdivision, rather than for the larger community of Lake County.

John, as he is generally known, says that all of his life he has been inclined toward scientific and technical matters. He built his first "wireless", as it was called, by the age of 10 - built it from scratch - and while still a sub-teen, he built his own workshop.

Clear Lake Dam was being built and as
He watched with enthusiastic interest as Cache Creek was being widened and straightened.
When it came time for his higher education, it was natural that it would be in a technical field - that of electrical engineering.

Back home in Lake County, he installed ranges and water heaters for P.G. & E., became sales agent, installer, and community fix-it man for radios, Kohler light plants (before P.G. & E. had reached the outlying areas), and other electrical equipment. During this time, he involved himself with several quicksilver mines and did considerable research on the wet method of mercury extraction. After determining that it was not a feasible method, he advised operators of other mines in the County not to attempt to use it... In his spare time, he was Manager (and therefore maintenance man!) for the original, privately-owned, Point Lakeview telephone system.

He also discovered volcanic gas bubbling out of the Lake and developed a method of capture and purification to obtain almost pure methane, which is an inflammable gas of considerable energy content. This fuel was used at the Jago's Resort and in the Jago home for many years for light, heat, and power.

Came the Second World War, during which time John did research for the War Department in what had been the old Marconi Laboratory in New Jersey. A principal project of that lab was a system of plane identification by radar, known as IFF, or Identification of Friend or Foe, a system which was very effective and therefore reduced casualties in combat. He devised and built antennas, delay lines, cavity oscillators, and lobe-switching devices for this transmitting-receiving system.(2)

Back in California, he worked as an engineer at the Lawrence Radiation Laboratory on the University of California campus, building and testing laboratory equipment for the Manhattan Project.(3)

John Jago

Page 2

After returning to the Resort on Jago Bay once more, John again bowed to necessity when he originated and built a very practical walnut dryer for use in the small family orchard. He also invented and constructed a water circulator to remove algae from the swimming area at the Resort. It has proved to be a very effective device if installed in suitable locations. For over 20 years, the swimmers at Jagos have not missed a day of swimming because of floating algae.⁽⁴⁾ He also developed a unique system of floats to break the wave action in front of his boat and beach area.

He was also able, by experimentation with a simple aeration process, to remove most of the minerals from his highly mineralized well water and thereby produce a very good quality water for the Jago Bay Subdivision community. Incidentally, the engineering and construction throughout the Subdivision were all done in accordance with his detailed plans.

Inasmuch as he has lived on or near the shores of Clear Lake most of his life, it perhaps follows, normally, that John's public activities, too, would be water-oriented. And because problems concerning the Lake have had a way of proliferating during recent years, he has found himself devoting what can only be termed a sacrificial amount of energy and time to such activities:

For years, he was active in the Lake County Sportsman's Club, concerning himself with the quality of fishing in Clear Lake.

For almost 25 years, he has served on the Mosquito Abatement Board, where his best contribution, perhaps, has been in studying, monitoring, and aiding in the gnat eradication program. And what's more, he has had almost perfect attendance at the monthly Board meetings.⁽⁵⁾

John took an active part in the Eel River Council, and more recently in the County-wide Task Force. He also helped to organize the Clear Lake Water Quality Council and as served since the beginning on its Board of Directors and on the Council Technical Committee.

⁽¹⁾ About 16 years ago, he helped to set up the Clear Lake Water District for the purpose of looking after the welfare of the Lake, which is the principal water supply of the riparian owners within the District. He has served as a Director of the District since its inception. Because the District entered the current litigation between Lake and Yolo Counties as an intervener on the side of Lake, John has devoted countless hours of study and effort assisting with the engineering and legal details of a proposed settlement between the two counties - being concerned that it should result in an improved operation of the Lake - one that is fair to Lake County as a County of Origin. As Board

President, he recently became one of the signatories to the legal Stipulation, which, hopefully, the Court will accept, thereby making the historic agreement legally binding⁽⁷⁾

Now, he and his fellow Board members are turning their earnest attention to the current high-water-low-water controversy, in an attempt to prevent the proposed grab by the State of private property along inland waterways up^{to} the high-water mark⁽⁸⁾

"Research and development?" Probably not, in the strictest sense. However, if the term includes a practical application of scientific research methods and principles to the needs of a community, whether large or small, then John most certainly qualifies in that category.

July 1, 1993

Note: The accompanying article was first written in the late 1970s, at the request of an organization in the County that was honoring those who had contributed to their community in the field of "research and development". Along with others, John received a citation at that time at an awarding ceremony. With numbered footnotes, I have expanded the original article, adding information I thought might be of interest to family and friends.

(1) One of them was the historic Koxotci Mine which you see on the Mountain and which he owned from 1939 to 1961, with a partner for the first few years. He realized that he liked the development and research having to do with a quicksilver (mercury) mine more than he enjoyed the actual work of a miner. Thus, after he had developed allergies to the mercury, he decided to sell the mine. There followed a string of would-be buyers because there was always someone out there who liked the romantic idea of owning a mine. Invariably it returned to John as the buyer was never interested in the unromantic tunnel work which John always advised as necessary.

During World War II, the Bradley Mining Company of San Francisco took it over. (They are the owners of the Sulphur Bank Mine on the East Lake, the Alaska-Juneau mine [gold], etc., and were the ones who used big surface equipment, leaving the white scar on the Mountain.) After the price of quicksilver dropped at the end of the War, they lost interest, and once more the Mine reverted to John. . . . The next and last buyer became interested in the exposed white rock (kaolin) used in making china and pottery) and eventually paid out on it ^{in 1961}. I do not know the present status of the Mine.

(2) Another project was the electronic equipment used when Allied troops went ashore on the various "beachheads" of Europe. John and 2 fellow-workers from MIT were assigned the job of making the then-current equipment lighter in weight. (Complaints were coming in that it was too heavy.) They actually developed equipment which was about one-tenth the weight of the current device and yet was much more powerful. John was assigned to build the factory model and deliver it to the manufacturer in Chicago only to find that the factory was still cranking out the old model, contrary

^{new³¹³}

to information received back in Jersey. Because of the time it would take for negotiating a new government contract and for retooling, he and his fellow workers were granted permission to set up an emergency assembly line in the lab. By working from 7:00 a.m. to midnight for over a month, they managed to manufacture a sufficient number of the new models in time for the next convoy headed for Europe, and ^{subsequently} received grateful thanks from the landing troops.

(3) The Atom Bomb project.

(4) Still in operation, 1993. Must be treasured and operated with care.

(5) Retired in 1989. Was given a farewell luncheon by the Board of Supervisors and received many citations of appreciation for his long service of over 35 years.

(6) July, 1961.

(7) The Legal Stipulation was accepted by the Court and has become known as the Solano Agreement, taking precedence over the historic Sopelvic Decree in Lake management... It might be mentioned here that the Clear Lake Water District had previously gone to court to prevent 7 dams from being built on the 7 creeks coming into Clear Lake, bringing suit against the Lake County Flood Control District, and the State Water Resources Board. Although the Court granted that the dams could be built, it stipulated that the water held back must be returned to the lake any year when the lake did not fill. This decision made the whole idea impractical, financially, though it is still suggested from time to time by newcomers to the County, particularly developers.

(8) Among other projects, they also planned a sump on Seigler Creek which would trap sand and thereby protect the Pigsby Riffle at the head of Cache Creek, but met so much opposition from the Park Service and Fish and Game that they could not go forward with what would have been a very beneficial project. They also started facing ^{the possibility of} ^{problem} liability and litigation with any other project they might undertake, so, with great reluctance the Board decided to dissolve the District. Inasmuch as it had already accomplished its principal legal goals, the dissolution was concluded.

in 1990. Its last act was to have its water attorney, Dan Gallery of Sacramento, make a definitive study of the whole high-water/low-water controversy from its inception to the present. Copies of this study were presented to all those in Lake County who might be faced with decisions yet to be made on this issue.

At some future time, I would like to discuss with those of you who are interested the many other "battles" that have been fought to keep Clear Lake intact and to enhance the quality and quantity of its water. It is a fascinating bit of Lake County history, one in which John paid a major role for over 40 years, and one of which we should all be aware.

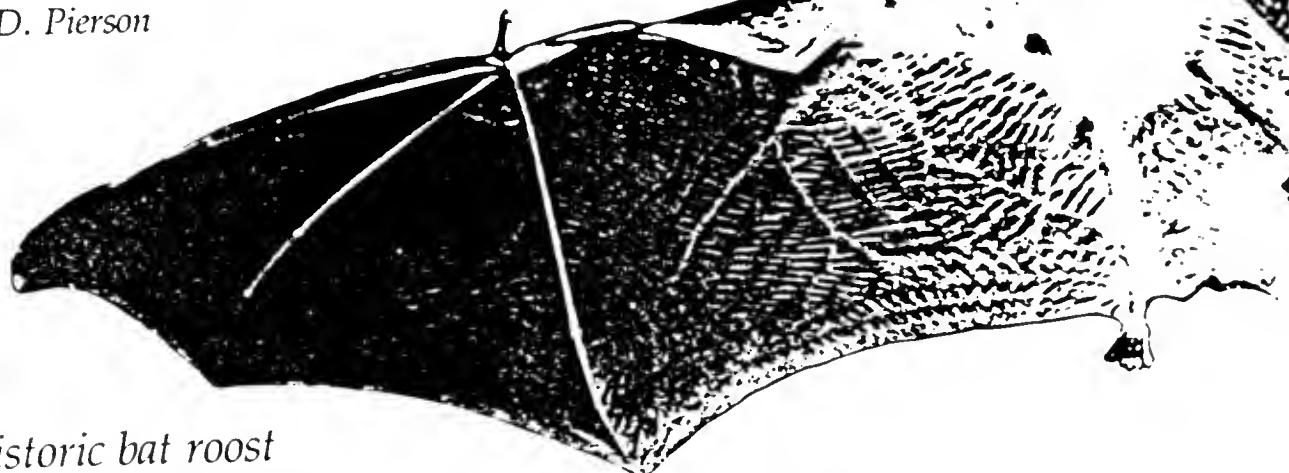
Irene Miller Jago

APPENDIX E

DOLORA KOONTZ

Help for Townsend's Big-Eared Bats in California

by Elizabeth D. Pierson



*When a historic bat roost
disappeared, a gold mining company
came to the rescue—*



*In northern California, idyllic landscapes like this are prime habitat for one of the state's most endangered bats—*Plecotus townsendii*. PHOTO BY MERLIN D. TUTTLE*

I was so preoccupied with the golden eagle soaring overhead that I almost stepped on a large berry-filled bear scat. A bevy of startled California quail flushed out of the manzanita bushes nearby, and in a rock pile straight ahead, a young western rattlesnake basked in the warm spring sunlight, belly full of small fence lizards. I looked across a narrow oak lined canyon to the rock outcrops beyond. This scene in northern California had the serenity of wilderness, yet less than a mile away was a large, active gold mining operation, the McLaughlin Mine, owned and operated by the Homestake Mining Company.

On that particular morning in early June 1988, McLaughlin's staff environmental engineer, Dolora Koontz, biologist Bill Rainey and I were walking toward an old mine tunnel. Thanks to conservation efforts by Homestake, the tunnel is now the



Above: Dixie Pierson (center), Bill Rainey (right), and Dolora

Koontz (left) set up an electronic data logger at the newly gated entrance to a former mining tunnel, now protected as a roost for a successfully relocated colony of Townsend's big-eared bats.

Above right: Dolora Koontz, an environmental engineer at the McLaughlin Mine, checks the gate at another protected tunnel, used by the colony as a temporary night roost.

Right: Old mining tunnels dot the northern California landscape, providing important roosting sites for bats.

PHOTOS BY MERLIN D. TUTTLE



one of the most important historic roosts for this subspecies. I found a very different landscape from the one described by bat researchers 40 years before. The formerly abandoned mine that had harbored the bats, indeed the whole hillside they were in, had been removed by the mining operation. With help from the McLaughlin staff, I eventually found the *Plecotus* colony, only one third its former size, in an abandoned mine tunnel about 100 yards from the active mining pit.

The mining company had been completely unaware that the collapsing old tunnels dotting their hillsides were significant roosting habitat for Townsend's big-eared bats. The use of modern technology to extract gold from abandoned workings is happening all across the American West. As a result, many important bat roosts are inadvertently being destroyed.

What distinguishes the McLaughlin Mine is their firm commitment to wildlife conservation and their sincere efforts to provide enduring protection for their resident bats—particularly for *Plecotus*. Once they were aware of what their mining operation was doing to the bats' habitat, one of their top priorities was to provide safe and lasting homes for them.

Our initial task was to encourage the big-eared bat colony to move to a more secure roost. The tunnel they were then occupying was scheduled for demolition, and new mining activity was steadily encroaching on this site. Ray Krauss, McLaughlin's pioneering Environmental Manager, asked me to find alternate roosts, putting the mining operation on hold until measures had been taken to ensure the colony's safety.

best protected maternity roost for one of California's most endangered bats, the western subspecies of Townsend's big-eared bat (*Plecotus townsendii townsendii*). A recently constructed, formidable gate protects the colony from human disturbance, and automatic monitoring equipment records bat activity in and out of the roost. As we downloaded our data from an electronic data logger outside the entrance, we noted with satisfaction that the newly protected colony—60 adult females and their

young—had formed a tight, noisy cluster in a warm ceiling dome just inside the gate. Several of them turned their heads to look at us. Despite our close approach, most remained at the entrance; they seemed to know they were safe.

That wasn't always the situation for this small colony. Almost a year before, while investigating the current status of *Plecotus* in California for the Department of Fish and Game, I came to this old mining district in northern Napa County in search of

Wildlife conservation became so important to the people at the McLaughlin Mine that all operations were put on hold until a safe home was found for a colony of endangered bats that had taken up residence in one of their tunnels—

Suddenly I had the somewhat daunting responsibility of designing a relocation program for this *Plecotus* colony, a species noted for its high sensitivity to disturbance. My apprehension increased when I realized how slight the chances might be that a bat colony, excluded from its preferred home, would accept a roost selected by a bat biologist. We nevertheless decided to take the risks. Several departments became actively involved. Dolora Koontz and several staff geologists—particularly Norm Lehrman, Dean Enderlin, and Pete Schwarzer—spent many hours tracking down old adits and endured numerous cold, late nights monitoring bat nets.

During the winter Dolora, Dean, and I identified two old tunnels which, based on available information, seemed suitable for the bats. In an unprecedented move, the mine diverted its construction crew from gold mining to bat roost construction, stabilizing the tunnel entrances and installing vandal proof steel gates. We considered the option of catching the animals and moving them to the new site, but feared such direct interference would lead them to reject our choice. The decision was made to let the bats fend for themselves, knowing that the alternatives we had provided were close by and almost certainly known to the animals.

In early May 1988, before the females had given birth to young, the relocation was on. We closed them out of their old roost and waited. Several days of anxiety followed as



Townsend's big-eared bats are exceptionally sensitive to human disturbance.
PHOTO BY MERLIN D. TUTTLE

there was no sign of the animals at either new location. Then, on our next visit two weeks later, we found the entire colony of 60 bats well established in one of the new roosts. Since that time we have monitored them on a regular basis and are hopeful that in time, the colony, now secure, will grow to its original, historical size.

Encouraged by their initial success, Ray wanted to do more. This winter he turned his attention to protecting a second *Plecotus* colony, remote from the current mining site, but located in another old mining area controlled by Homestake. When the females return from hibernation this spring, they will find their tunnel roost entrances all have gates and that for the first time in many years they will

have an opportunity to raise their young without disturbance. This colony was first studied by BCI member Dr. Phil Leitner over 20 years ago and was known at that time to be at least three times its current size. But these old tunnels have experienced increasing human traffic in recent years, due in part to the renewed popularity of a nearby resort.

This second bat colony, situated in an open woodland, offers an ideal opportunity to investigate the foraging behavior of *Plecotus*, and last fall, with support from McLaughlin, we initiated such a study. With volunteers from the mining staff, the State Department of Fish and Game,

the University of California, and the caving community, several colleagues and I organized an all night vigil to monitor the feeding behavior of bats that had been outfitted with small temporary fluorescent tags. This effort engendered such enthusiasm among the mining staff that, back at headquarters, bat mobiles now hang over desks, bat photos decorate the walls, and bat t-shirts have become department uniform.

A dedicated and inventive man, Ray Krauss also has suggested incorporating artificial roosts, especially hibernacula, into the growing piles of mining tailings, which are being re-vegetated by the company and eventually will become part of the landscape. Ray is constantly pushing his company and the mining industry to do more. He has committed support to a long term monitoring program and ecological study and has funded the development of sophisticated

monitoring equipment (still in experimental stages) that could dramatically change our ability to census bat populations without disturbing the animals. He has contacted environmental managers at other mines to spread the word about what he feels the industry can do to provide and protect wildlife habitat. His efforts already are having a statewide impact. Other agencies (in particular, the Bureau of Land Management and a naval base), inspired by the successful efforts at the McLaughlin Mine, have expressed interest in also protecting big-eared bat roosts.

Such efforts are vital to the survival of *Plecotus* in coastal California where at present only seven small colonies are known. Once abundant, the species has experienced alarming population declines in the past 40 years. Because of roost destruction and human disturbance, there has been a



Ray Krauss, McLaughlin's Environmental Manager, is firmly committed to protecting bats. PHOTO BY ELIZABETH D. PIERNON

46% decrease in the number of colonies and a 65% decline in overall population size. Of the seven currently known roosts for the coastal subspecies, only three receive active protection—the two at the McLaughlin Mine and another at Point Reyes National Seashore.

When I first met Ray Krauss, he said to me, "We are taking from this earth, and I want to give back." As a result, two very important *Plecotus* colonies have been saved, and a precedent has been set which should have far reaching consequences for bat conservation.

Elizabeth D. Pierson received her Ph.D. from the University of California at Berkeley in 1986. In addition to her research on bats in California, she is currently involved in projects on the ecology, conservation, and evolution of bats in New Zealand and the South Pacific.

Bat Conservation in California

As recently as two years ago, the State of California had never funded a research project for bats. Then in 1986, Dan Williams, a Professor of Zoology at Stanislaus State, reviewed the status of all mammals in California for the State Department of Fish and Game. He designated 36 species as "Mammals of Special Concern." All animals on his list, which includes seven of California's 23 bat species, receive no legal protection, but clearly have conservation needs and deserve consideration for protective listing.

The California Department of Fish and Game responded quickly by calling a meeting with Williams and four California scientists actively engaged in bat research—Dr. Denny Constantine, a member of BCI's Scientific Advisory Board, and bat biologists Drs. Pat Brown, Phil Leitner, and Elizabeth "Dixie" Pierson, all BCI members. The result was that Townsend's big-eared bat (*Plecotus townsendii*) was given top priority, and the Department initiated a three year study to determine the status of this species in California. The study, now in its second year, is being conducted by Dixie Pierson.

There are four subspecies of big-eared bats in the United States—two of them in California. All have experienced alarming population declines in recent years. The two eastern subspecies, the Virginia big-eared bat and the Ozark big-eared bat, were placed on the Federal Endangered Species List in 1979. One of the two western subspecies, *P. t. townsendii*, is currently a candidate for Federal listing. *Plecotus* has state endangered status in Washington, and in Oregon it has been designated a sensitive species by both the Forest Service and Bureau of Land Management. Biologist and BCI mem-

ber, Mark Perkins, investigated the status of big-eared bats in Oregon and found the species to be seriously endangered there.* Dixie Pierson's survey in California indicates serious declines in California as well.

This spring the state will fund a second survey to investigate the status of California leaf-nosed bats (*Macrotus californicus*), to be conducted by Pat Brown. These bats are unique in a number of ways. They belong to a



California leaf-nosed bats will be the subject of a new state-funded survey beginning this spring.

PHOTO BY ELIZABETH D. PIERNON

large family of New World bats, the Phyllostomidae (leaf-nosed bats), mainly found in the tropics of Central and South America. Most bats in this group are fruit and nectar feeders, but California leaf-nosed bats are insectivorous. The species is found mainly in mine tunnels along the Colorado River and is the only one of the family that is a year round resident in the United States. Unlike most North American bats, California leaf-nosed bats do not hibernate or migrate. Instead,

they spend the winter in a few geothermally heated mines where they are very vulnerable to human disturbance.

Work to date has revealed enormous support for bats in California and has suggested some important ways to protect them and to increase public awareness. For example, the recreational caving community has shown tremendous interest in the big-eared bat project. Members of several grottoes have provided Dixie with locality data, donated weeks of time to assist in the field and offered support for protecting roosts. Another promising development has been the interest shown by federal, state, regional, and private park personnel. California is blessed with an extensive park and reserve system—seven national parks, seven national monuments, plus numerous state and regional parks and private reserves.

Dixie contacted a number of these facilities during the course of her big-eared bat survey and has been heartened by the response. "Every single park or reserve I have contacted has been hungry for information on bats—wanting to know what species are resident on their land and eager to incorporate bat education into their nature programs. For example, the Audubon Canyon Ranch, a very important reserve in Marin County, now has bat education as part of their docent training program. Clear Lake State Park in Lake County, which has a large Yuma myotis (*Myotis yumanensis*) colony under the shake siding of their new Visitor's Center, is planning to make the evening bat exodus one of their fireside events. A coordinated program of bat education for parks would have an enormous impact and is something that should be considered nationwide."

Of the three protected big-eared roosts, only one occurs on Federal land. The colony of 125 females—the largest known colony for the coastal subspecies—lives in the attic of an old abandoned farm house on the grounds of Point Reyes National Seashore. When Dixie



In a survey of Townsend's big-eared bats that began two years ago, only seven small colonies were found to remain in coastal California. PHOTO BY MERLIN D. TUTTLE

first found this colony, she learned that the National Park Service, concerned about vandalism and fire, was planning to demolish the building. As soon as the Park knew about the bats, however, they changed their plans, fixed some leaks, secured the doors and windows, and turned the house over to the bats.

Park biologist Dr. Gary Fellers has become actively involved and committed substantial portions of his research time and funds to studying the colony. Last winter he installed sophisticated monitoring equipment



In a world of disappearing natural habitat, bats make use of a variety of roosting sites, many of which are now threatened by humans. Above, Dixie Pierson and Bill Rainey take data from one of California's small bridges in an attempt to understand why bats are attracted to them as roosts. Below, Townsend's big-eared bats sometimes roost in abandoned buildings, subject to be torn down. PHOTOS BY MERLIN D. TUTTLE

which is providing information on the roost requirements of this species, and he and Dixie have initiated a long term population study of this colony. At the end of last summer, a light tagging session (putting little fluorescent balls on the bats and following them on their feeding routes) brought so many volunteers that people had to be turned away.

The survey of *Plecotus* may also help other bat species. "One side benefit of this study," Dixie said, "is that in the process of looking for *Plecotus* we have found many other bat colonies, and have gathered information on a number of species like the Fringed myotis (*Myotis thysanodes*) and the Long-eared myotis (*Myotis evotis*), about which very little is known. I am very encouraged by the response of the State and the public to this survey. I feel as though we are making real progress in bat conservation in California."

APPENDIX F

WESTERN MINING IN THE TWENTIETH CENTURY ORAL HISTORY SERIES

PREFACE--Western Mining in the Twentieth Century

The oral history series on Western Mining in the Twentieth Century documents the lives of leaders in mining, metallurgy, geology, education in the earth and materials sciences, mining law, and the pertinent government bodies. The field includes metal, non-metal, and industrial minerals. In its tenth year the series numbers thirty-five volumes completed and others in process.

Mining has changed greatly in this century: in the technology and technical education; in the organization of corporations; in the perception of the national strategic importance of minerals; in the labor movement; and in consideration of health and environmental effects of mining.

The idea of an oral history series to document these developments in twentieth century mining had been on the drawing board of the Regional Oral History Office for more than twenty years. The project finally got underway on January 25, 1986, when Mrs. Willa Baum, Mr. and Mrs. Philip Bradley, Professor and Mrs. Douglas Fuerstenau, Mr. and Mrs. Clifford Heimbucher, Mrs. Donald McLaughlin, and Mr. and Mrs. Langan Swent met at the Swent home to plan the project, and Professor Fuerstenau agreed to serve as Principal Investigator.

An advisory committee was selected which included representatives from the materials science and mineral engineering faculty and a professor of history of science at the University of California at Berkeley; a professor emeritus of history from the California Institute of Technology; and executives of mining companies. Langan Swent delighted in referring to himself as "technical advisor" to the series. He abetted the project from the beginning, directly with his wise counsel and store of information, and indirectly by his patience as the oral histories took more and more of his wife's time and attention. He completed the review of his own oral history transcript when he was in the hospital just before his death in 1992. As some of the original advisors have died, others have been added to help in selecting interviewees, suggesting research topics, and securing funds.

The project was presented to the San Francisco section of the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME) on "Old-timers Night," March 10, 1986, when Philip Read Bradley, Jr., was the speaker. This section and the Southern California section of AIME provided initial funding and organizational sponsorship.

The Northern and Southern California sections of the Woman's Auxiliary to the AIME (WAAIME), the California Mining Association, and the Mining and Metallurgical Society of America (MMSA) were early supporters. Later the National Mining Association became a sponsor. The

project was significantly advanced by a generous bequest received in November 1997 upon the death of J. Ward Downey, UC Berkeley alumnus and early member of the mining series advisory committee. His own oral history was completed in 1992. Other individual and corporate donors are listed in the volumes. Sponsors to date include nineteen corporations, four foundations, and 113 individuals. The project is ongoing, and funds continue to be sought.

The first five interviewees were all born in 1904 or earlier. Horace Albright, mining lawyer and president of United States Potash Company, was ninety-six years old when interviewed. Although brief, this interview adds another dimension to a man known primarily as a conservationist.

James Boyd was director of the industry division of the military government of Germany after World War II, director of the U.S. Bureau of Mines, dean of the Colorado School of Mines, vice president of Kennecott Copper Corporation, president of Copper Range, and executive director of the National Commission on Materials Policy. He had reviewed the transcript of his lengthy oral history just before his death in November, 1987. In 1990, he was inducted into the National Mining Hall of Fame, Leadville, Colorado.

Philip Bradley, Jr., mining engineer, was a member of the California Mining Board for thirty-two years, most of them as chairman. He also founded the parent organization of the California Mining Association, as well as the Western Governors Mining Advisory Council. His uncle, Frederick Worthen Bradley, who figures in the oral history, was in the first group inducted into the National Mining Hall of Fame in 1988.

Frank McQuiston, metallurgist for the Raw Materials Division of the Atomic Energy Commission and vice president of Newmont Mining Corporation, died before his oral history was complete; thirteen hours of taped interviews with him were supplemented by three hours with his friend and associate, Robert Shoemaker.

Gordon Oakeshott, geologist, was president of the National Association of Geology Teachers and chief of the California Division of Mines and Geology.

These oral histories establish the framework for the series; subsequent oral histories amplify the basic themes. After over thirty individual biographical oral histories were completed, a community oral history was undertaken, documenting the development of the McLaughlin gold mine in the Napa, Yolo, and Lake Counties of California (the historic Knoxville mercury mining district), and the resulting changes in the surrounding communities. This comprises forty-three interviews.

Future researchers will turn to these oral histories to learn how decisions were made which led to changes in mining engineering education, corporate structures, and technology, as well as public policy regarding

minerals. In addition, the interviews stimulate the deposit, by interviewees and others, of a number of documents, photographs, memoirs, and other materials related to twentieth century mining in the West. This collection is being added to The Bancroft Library's extensive holdings. A list of completed and in process interviews for the mining series appears at the end of this volume.

The Regional Oral History Office is under the direction of Willa Baum, division head, and under the administrative direction of The Bancroft Library.

Interviews were conducted by Malca Chall and Eleanor Swent.

Willa K. Baum, Division Head
Regional Oral History Office

Eleanor Swent, Project Director
Western Mining in the Twentieth
Century Series

January 1998
Regional Oral History Office
University of California, Berkeley

Western Mining in the Twentieth Century Oral History Series

Interviews Completed, September 1998

Horace Albright, *Mining Lawyer and Executive, U.S. Potash Company, U.S. Borax, 1933-1962*, 1989

Samuel S. Arentz, Jr., *Mining Engineer, Consultant, and Entrepreneur in Nevada and Utah, 1934-1992*, 1993

James Boyd, *Minerals and Critical Materials Management: Military and Government Administrator and Mining Executive, 1941-1987*, 1988

Philip Read Bradley, Jr., *A Mining Engineer in Alaska, Canada, the Western United States, Latin America, and Southeast Asia*, 1988

Catherine C. Campbell, Ian and Catherine Campbell, *Geologists: Teaching, Government Service, Editing*, 1989

William Clark, *Reporting on California's Gold Mines for the State Division of Mines and Geology, 1951-1979*, 1993

Norman Cleaveland, *Dredge Mining for Gold, Malaysian Tin, Diamonds, 1921-1966; Exposing the 1883 Murder of William Raymond Morley*, 1995

James T. Curry, Sr., *Metallurgist for Empire Star Mine and Newmont Exploration, 1932-1955; Plant Manager for Calaveras Cement Company, 1956-1975*, 1990

Donald Dickey, *The Oriental Mine*, 1938-1991, 1996

J. Ward Downey, *Mining and Construction Engineer, Industrial Management Consultant, 1936 to the 1990s*, 1992

Warren Fenzi, *Junior Engineer to President, Director of Phelps Dodge, 1937 to 1984*, 1996

Hedley S. "Pete" Fowler, *Mining Engineer in the Americas, India, and Africa, 1933-1983*, 1992

James Mack Gerstley, *Executive, U.S. Borax & Chemical Corporation; Trustee, Pomona College; Civic Leader, San Francisco Asian Art Museum*, 1991

Robert M. Haldeman, *Managing Copper Mines in Chile: Braden, CODELCO, Minerec, Pudahuel; Developing Controlled Bacterial Leaching of Copper from Sulfide Ores; 1941-1993*, 1995

John F. Havard, *Mining Engineer and Executive, 1935-1981*, 1992

Wayne Hazen, *Plutonium Technology Applied to Mineral Processing; Solvent Extraction; Building Hazen Research; 1940-1993*, 1995

George Heikes, *Mining Geologist on Four Continents, 1924-1974*, 1992

Helen R. Henshaw, *Recollections of Life with Paul Henshaw: Latin America, Homestake Mining Company*, 1988

Homestake Mine Workers, Lead, South Dakota, 1929-1993, interviews with Clarence Kravig, Wayne Harford, and Kenneth Kinghorn, 1995

Lewis L. Huelsdonk, *Manager of Gold and Chrome Mines, Spokesman for Gold Mining, 1935-1974*, 1988

William Humphrey, *Mining Operations and Engineering Executive for Anaconda, Newmont, Homestake, 1950 to 1995*, 1996

James Jensen, *Chemical and Metallurgical Process Engineer: Making Deuterium, Extracting Salines and Base and Heavy Metals, 1938-1990s*, 1993

Arthur I. Johnson, *Mining and Metallurgical Engineer in the Black Hills: Pegmatites and Rare Minerals, 1922 to the 1990s*, 1990

G. Frank Joklik, *Exploration Geologist, Developer of Mt. Newman, President and CEO of Kennecott, 1949-1996; Chairman, Salt Lake 2002 Olympic Winter Games Committee*, 1997

Evan Just, *Geologist: Engineering and Mining Journal, Marshall Plan, Cyprus Mines Corporation, and Stanford University, 1922-1980*, 1989

Robert Kendall, *Mining Borax, Shaft-Freezing in Potash Mines, U.S. Borax, Inc., 1954-1988*, 1994

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume I, 1998

Anderson, James, "Homestake Vice President-Exploration"

Baker, Will, "Citizen Activist, Yolo County"

Birdsey, Norman, "Metallurgical Technician, McLaughlin Process Plant"

Bledsoe, Brice, "Director, Solano Irrigation District"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume II, 1998

Cerar, Anthony, "Mercury Miner, 1935-1995"
Ceteras, John, "Organic Farmer, Yolo County"
Conger, Harry, "President, Chairman, and CEO, Homestake Mining Company, 1977 to 1994"
Corley, John Jay, "Chairman, Napa County Planning Commission, 1981-1985"
Cornelison, William, "Superintendent of Schools, Lake County" (Includes an interview with John A. Drummond, Lake County Schools Attorney)

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume III, 1998

Crouch, David, "Homestake Corporate Manager-Environmental Affairs"
Enderlin, Elmer, "Miner in Fifty-Eight Mines"
Fuller, Claire, "Fuller's Superette Market, Lower Lake"
Goldstein, Dennis, "Homestake Corporate Lawyer"
Guinivere, Rex, "Homestake Vice President-Engineering"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume IV, 1998

Gustafson, Donald, "Homestake Exploration Geologist"
Hanchett, Bonnie, "Owner and Editor, Clearlake Observer"
Hickey, James, "Director, Napa County Planning Department"
Jago, Irene, "Lower Lake High School Teacher"
Jonas, James, "Bulk Fuel Plant Owner, Lower Lake"
Koontz, Dolora, "Environmental Engineer, McLaughlin Mine"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, 1978-1995, Volume V, 1998

Kritikos, William, "Operator, Oat Hill Mine"
Landman, John, "Rancher, Morgan Valley"
Lyons, Roberta, "Journalist and Environmentalist"
Madsen, Roger, "Homestake Mechanical Engineer"
Magoon, Beverly, "Merchant and Craft Instructor, Lower Lake"
McGinnis, Edward, "Worker at the Reed Mine"

Marian Lane, Mine Doctor's Wife in Mexico During the 1920s, 1996

Plato Malozemoff, A Life in Mining: Siberia to Chairman of Newmont Mining Corporation, 1909-1985, 1990

James and Malcolm McPherson, Brothers in Mining, 1992

Frank Woods McQuiston, Jr., Metallurgist for Newmont Mining Corporation and U.S. Atomic Energy Commission, 1934-1982, 1989

Gordon B. Oakeshott, The California Division of Mines and Geology, 1948-1974, 1988

James H. Orr, An Entrepreneur in Mining in North and South America, 1930s to 1990s, 1995

Vincent D. Perry, *A Half Century as Mining and Exploration Geologist with the Anaconda Company*, 1991

Carl Randolph, *Research Manager to President, U.S. Borax & Chemical Corporation, 1957-1986*, 1992

John Reed, *Pioneer in Applied Rock Mechanics, Braden Mine, Chile, 1944-1950; St. Joseph Lead Company, 1955-1960; Colorado School of Mines, 1960-1972, 1993*

Joseph Rosenblatt, *EIMCO, Pioneer in Underground Mining Machinery and Process Equipment, 1926-1963*, 1992

Eugene David Smith, *Working on the Twenty-Mule Team: Laborer to Vice President, U.S. Borax & Chemical Corporation, 1941-1989*, 1993

Simon Strauss, *Market Analyst for Non-ferrous Metals and Non-metallic Minerals, Journalist, Mining Corporation Executive, 1927-1994*, 1995

Langan W. Swent, *Working for Safety and Health in Underground Mines: San Luis and Homestake Mining Companies, 1946-1988*, 1995

James V. Thompson, *Mining and Metallurgical Engineer: the Philippine Islands; Dorr, Humphreys, Kaiser Engineers Companies; 1940-1990s*, 1992

William Wilder, *Owner of One Shot Mining Company: Manhattan Mercury Mine, 1965-1981*, 1996

Interviews In Process

Robert Clarkson, Clarkson Company

John Livermore, geologist

David Lowell, geologist

Alexander Wilson, BHP-Utah Minerals

Knoxville/McLaughlin Interviews in Process:

Krauss, Raymond, "Environmental Manager, McLaughlin Mine"

McKenzie, Robert, "Photographer and Local Historian, Napa County"

Moskowite, Harold, "County Supervisor, Napa County"

Onstad, Marion, "Morgan Valley Rancher, Homestake Secretary"

Parker, Ronald, "General Manager, McLaughlin Mine, 1988-1994"

Purtell, Patrick, "General Manager, McLaughlin Mine, 1994"

Stoehr, Richard, "Homestake Vice President and Director"

Strapko, Joseph, "Homestake Field Geologist"

Thompson, Jack, "General Manager, McLaughlin Mine, 1981-1988"

Thompson, Twyla, "County Supervisor, Yolo County"

Tindell, Avery, "Capay Valley Environmentalist"

Turney, John, "McLaughlin Metallurgist: Pioneering Autoclaving for Gold"

Underwood, Della, "Knoxville Rancher, McLaughlin Mine Surveyor"

Wilcox, Walter, "County Supervisor, Lake County"

ADVISORS TO THE SERIES, WESTERN MINING IN THE TWENTIETH CENTURY

Professor Douglas Fuerstenau, Principal Investigator
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 Mineral Engineering, University of California, Berkeley

Robert R. Beebe
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Philip R. Bradley
 Former Chairman, California State
 Mining and Geology Board

Henry Colen
 President, San Francisco Mining
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 Mineral Engineering, University of
 California, Berkeley

*J. Ward Downey
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 Management Consultant

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Professor Joseph A. Pask
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 Mineral Engineering, University of
 California, Berkeley

*Professor Emeritus Rodman Paul,
 Department of History, California
 Institute of Technology

*Langan W. Swent
 Vice President (retired), Homestake
 Mining Company

* Deceased during the period of the
 project

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Eleanor Herz Swent

Born in Lead, South Dakota, where her father became chief metallurgist for the Homestake Mining Company. Her mother was a high school geology teacher before marriage.

Attended schools in Lead, South Dakota, Dana Hall School, and Wellesley College, Massachusetts. Phi Beta Kappa. M.A. in English, University of Denver. Assistant to the President, Elmira College, New York. Married to Langan Waterman Swent, mining engineer.

Since marriage has lived in Tayoltita, Durango, Mexico; Lead, South Dakota; Grants, New Mexico; Piedmont, California.

Teacher of English as a Second Language to adults in the Oakland, California public schools. Author of an independent oral history project, Newcomers to the East Bay, interviews with Asian refugees and immigrants. Oral historian for the Oakland Neighborhood History Project.

Interviewer, Regional Oral History Office since 1985, specializing in mining history.

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